WEST CHESTER UNIVERSITY

Undergraduate Catalog

1994-95

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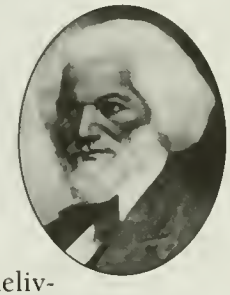
Frederick Douglass Commemorative Celebration



In 1995, West Chester University will become the site for a centennial celebration of the life and work of Frederick Douglass (1818-1895). The commemoration is entitled "The Life and World of Frederick Douglass" and will span a two-year period, beginning in May 1994 and extending throughout 1995, with follow-up activities. Douglass was a nineteenth-century slave who escaped bondage to become one of the distinctive voices for liberty in American history.

Frederick Douglass was a frequent visitor to the West Chester area. He delivered addresses at Horticultural Hall (now called the Chester County Historical Society) on July 14, 1865 and November 15, 1875 and, about 40 years prior to his last visit to West Chester, he addressed a gathering of townspeople assembled in front of the old Market House. During that occasion he was the guest of Hannah and Mary Darlington, who operated a boarding house on 108 West Gay Street.

On February 1, 1895 Douglass, at the invitation of Dr. George Morris Philips, principal of then West Chester Normal School, delivered on campus what would be his last public lecture. A review of his talk appeared the next day in the *Daily Local News*. Philips, a dedicated antiquarian, enjoyed aquaintanceships with celebrated figures of his time. Dr. Philips' private library contained many autographed copies of texts signed by authors like Douglass who were also guests in his home. When Douglass was participating in the World's Columbian Exposition in May 1893, he graciously wrote Dr. Philips to let him know that he was aware of the former's request for a signed copy of his *Life and Times*. The following January, Douglass complied with Dr. Philips' request and sent the book with a cordial letter, which in turn led to an invitation for Douglass to speak in West Chester. Initially Douglass was forced to decline the offer because of his failing health. He eventually made the trip to West Chester in February 1895 when he delivered his final public speech of record.

Communications Directory

MAILING ADDRESS:	West Chester University West Chester, PA 19383
TELEPHONES:	Dial 436 plus number in parentheses. For offices not shown here, call the University Information Center: 610-436-1000.
Academic Advising	Director of Academic Advising, Lawrence Center (3505)
Academic Development Program	Director of Academic Development Program, Lawrence Center (3505)
Admissions/Undergraduate Catalogs	Director of Admissions, 100 West Rosedale Avenue (3411)
Affirmative Action	Office of Affirmative Action, Lawrence Center (2433)
Billing/Payments	Office of the Bursar, Elsie O. Bull Center (2552)
Bookstore	Student Services Inc., Peoples Maintenance Building (2242)
Careers/Placement	Director of Career Development Center, Lawrence Center (2501)
Continuing Education	Dean of University College, Elsie O. Bull Center (3550) Director of Adult, Evening, and Alternative Studies, Elsie O. Bull Center (3550) Director, Center of Business, Industry, and Government, Elsie O. Bull Center (3550)
Counseling	Counseling Center, Lawrence Center (2301)
Financial Aid/ Work Study	Director of Financial Aid, Elsie O. Bull Center (2627)
Graduate Studies/ Catalogs	Dean of Graduate Studies and Sponsored Research, Old Library (2943)
Housing	Residence Life, Sykes Union Building (3307)
Police	Public Safety Department, Peoples Maintenance Building (3311)
Public Relations	Director of University Relations, Smith House (3383)
Student Activities and University Events	Student Programming Dept./Student Activities Council, Peoples Maintenance Building (2983) or Student Union Information Desk (2984)
Student Services Inc.	Peoples Maintenance Building (2955)
Scheduling/Registration	University Registrar, Elsie O. Bull Center (3541)
Summer Sessions	Office of the Registrar, Elsie O. Bull Center (2230)
Teacher Certification	Teacher Certification Office, Recitation Hall (2426)

Accreditation

West Chester University is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The National Athletic Training Association, The National Association of Schools of Music, The Council on Social Work Education (baccalaureate level), The National League for Nursing, The Society for Public Health Education, The American Chemical Society, The Commission on Accreditation in Clinical Chemistry, and the Joint Review Committee for Respiratory Therapy Education. West Chester University has been given program approval by the Department of Education of the Commonwealth of Pennsylvania for the certification of teachers.

Nondiscrimination/Affirmative Action Policy

West Chester University is committed to providing leadership in extending equal opportunities to all individuals. Accordingly, the University will continue to make every effort to provide these rights to all persons regardless of race, religion, sex, national origin, ancestry, age, marital status, sexual orientation, handicap, or veteran status. This policy applies to all members of the University community, including students, faculty, staff, and administrators. It also applies to all applicants for admission or employment and all participants in University-sponsored activities.

This policy is in compliance with federal and state laws, including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendment of 1972, Section 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act of 1990, and Executive Order of the Governor of Pennsylvania.

Any individual having suggestions, problems, complaints, or grievances with regard to equal opportunity or affirmative action is encouraged to contact the director of affirmative action, 104 Lawrence Center, 610-436-2433.

Sexual Harassment Policy

West Chester University is committed to equality of opportunity and freedom from discrimination for all its students and employees. Based on this commitment and the recognition that sexual harassment is a form of discrimination, which is of a growing concern to the higher education community, the University provides the following policy:

> Harassment on the basis of sex is a violation of Title VII of the U.S. Civil Rights Act, Title IX of the Educational Amendments of 1972, and of the Pennsylvania Human Relations Act. Because West Chester University is committed to establishing an environment free from discrimination and harassment, sexual harassment will not be tolerated in any form. Upon official filing of a complaint, immediate investigation will be made culminating in appropriate corrective action where warranted, which may include termination of the relationship with the University.
>
> Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature occurring when:
>
> 1. submission of such conduct is made either explicitly or implicitly a term or condition of an individual's employment, or of a student's academic status or treatment;
> 2. submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting such an individual, or
> 3. such conduct creates an intimidating, hostile, or offensive living, working, or academic environment to a reasonable person.

A complete copy of the University's Sexual Harassment Policy document, inclusive of the investigatory procedures, may be obtained from the Office of Affirmative Action.

Individuals who believe themselves to be the victims of sexual harassment, or who have questions about the University's policy on this matter should contact the director of affirmative action, 104 Lawrence Center, 610-436-2433.

The provisions of this catalog are not to be regarded as an irrevocable contract between the student and the University. West Chester University reserves the right to change any provisions or requirements at any time.

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Introducing West Chester

Quality education at a reasonable price . . . this is the goal of West Chester University, the second largest of the 14 institutions of higher learning that compose the State System of Higher Education of the Commonwealth of Pennsylvania. A comprehensive and multipurpose university, West Chester serves individuals of all ages with a variety of programs to fill their educational needs.

West Chester offers degrees in the arts and sciences, teacher training and certification, advanced study preparation in fields such as medicine and law, education for specific professions, and continuing education. See page 52 for a complete listing of undergraduate degree programs.

Total enrollment at West Chester includes more than 10,000 undergraduate students and about 2,000 graduate students. While most undergraduates are recent high school graduates preparing for career objectives, many others are older individuals, including veterans and homemakers, who either never before had the opportunity for a college education or whose schooling was interrupted.

Most students are residents of Pennsylvania, but students from other states and foreign countries are welcome. West Chester's student body represents a cross section of many ethnic, racial, and religious groups and includes students from all economic levels.

Like the world around it, West Chester University is constantly changing and growing. The school continues to broaden and modify the nature and number of its programs to reflect the needs of its students in their endeavor to prepare themselves for success and fulfillment in life.

Missions of the University

The missions of the University include instruction, research, and community service. Initially it is emphasized that these missions and their concomitant goals are interrelated. The scholarship and creative development that faculty members experience in their professional fields are important prerequisites for university-level teaching in the 1990s. The faculty that engages its students in the process of discovery and in community service gives them hands-on experience that represents the active learning and commitment that is teaching and learning at its best.

This combination of missions, common to all comprehensive universities, helps students to fulfill themselves as individuals and as members of society. This is accomplished by providing opportunities for personal growth through intellectual, cultural, and aesthetic stimulation; specific career training; advanced involvement in the academic process; research and creative activities; and public service. An emphasis on student involvement and on faculty interaction with students distinguishes West Chester from research institutions and identifies it with the tradition of institutions committed both to the creation and sharing of knowledge and aesthetics. It also distinguishes West Chester University from higher educational institutions that emphasize teaching with little or no support for the creation of new knowledge and aesthetics. We are committed to the successful integration of teaching, scholarship, and service.

The University seeks to insure that there is diversity within its work force and student body in compliance with its commitment to affirmative action and equal opportunity. It clearly includes in its mission the provision of access to higher education for a wide variety of the commonwealth's citizens, including those from disadvantaged academic or financial circumstances. The University places particular value on academic freedom and human diversity. It seeks to develop an environment characterized by intellectual honesty, scholarship, mutual respect, and service to the academic and larger communities.

The University's comprehensive missions, and the means of accomplishing them, have developed from the University's specific legal mandate and its traditions of educational service, as well as from the changing needs of society and the nature of academe.

The Frederick Douglass Society

Drawing its content from our campus history of social consciousness and its structure from a variety of models in public life, the Frederick Douglass Society of West Chester University is the organization of black professional and nonprofessional staff at West Chester. Named in 1983 for one of the 19th century's most distinguished advocates of human freedom, the organization is oriented toward self-help and improvement by offering a collective voice in the affairs of the University. Its programs also aim to stimulate other groups on campus to enrich our climate. The society annually raises money for scholarship funds, in order to increase the economic options available to the student body generally and to blacks and other ethnic groups as well. It also seeks, by the example of Douglass, to promote an intellectual standard that is not only grounded in excellence but profoundly rooted in the public mission of higher education.

Institute for Women

The Institute for Women is an independent body designed to represent the interests of women on the campus. It serves as the parent organization for the Women's Center, the Women's Studies Program, and the Title IX and Sex Discrimination Board. The institute is headed by a director and a Board of Directors.

The institute sponsors a number of activities to enhance the self-esteem and career success of women at the University: the Woman-in-Residence Program, Grace Cochran Research on Women Award, Visiting Professor Program, Graduate Grant and Endowed Book Funds. The institute prepares periodic reports on the status of women at the University and has also secured Charlotte W. Newcombe Scholarship Grants for mature or second-career women. The Institute for Women is located in 211 Main Hall. For more information call 610-436-2464/2122.

History of the University

Although its founding year is 1871, the University in fact has deeper roots trac-

ing from West Chester Academy, a private, state-aided school that existed from 1812 to 1869. The academy enjoyed strong support from the highly intellectual Chester County Cabinet of the Natural Sciences of the pre-Civil War decades. It was recognized as one of Pennsylvania's leading preparatory schools, and its experience in teacher training laid the groundwork for the normal school years that were to follow.

As the state began to take increasing responsibility for public education, the academy was transformed into West Chester Normal School, still privately owned but state certified. The normal school admitted its first class, consisting of 160 students, on September 25, 1871. In 1913, West Chester became the first of the normal schools to be owned outright by the Commonwealth.

West Chester became West Chester State Teachers College in 1927 when Pennsylvania initiated a four-year program of teacher education. In 1960, as the Commonwealth paved the way for liberal arts programs in its college system, West Chester was renamed West Chester State College, and two years later introduced the liberal arts program that turned the one-time academy into a comprehensive college.

In recognition of the historic merit of the campus, in 1981 the West Chester State College Quadrangle Historic District was placed on the National Register of Historic Places. The buildings included in this historic district are Philips Memorial Building, Ruby Jones Hall, Recitation Hall, and the Old Library. Except for Philips, these buildings are all constructed of native Chester County serpentine stone.

West Chester State achieved another major milestone with passage of the State System of Higher Education bill. West Chester and the other 12 state colleges became universities in the State System of Higher Education on July 1, 1983. Along with its new name — West Chester University of Pennsylvania of the State System of Higher Education — the institution acquired a new system of governance and the opportunity to expand its degree programs.

Location of the University

West Chester University is in West Chester, a town that has been the seat of government in Chester County since 1786. With a population of about 20,000, the borough is small enough to have the pleasant aspects of a tree-shaded American town, large enough to contain essential services and the substance of a vigorous community, and old enough to give the student exposure to America's early history. Students can walk to West Chester's many churches. The town has excellent stores and a fine hospital.

West Chester was settled in the early 18th century, principally by members of the Society of Friends. In the heart of town is its courthouse, a classical revival building designed in the 1840s by Thomas U. Walter, one of the architects for the Capitol in Washington, D.C.

West Chester today is part of the rapidly growing suburban complex surrounding Philadelphia and offers interesting opportunities for the study of local, county, and regional government in a period of change and growth.

Philadelphia is 25 miles to the east and Wilmington 17 miles to the south, putting the libraries, museums, and other cultural and historical resources of both cities in easy reach. Valley Forge, the Brandywine Battlefield, Longwood Gardens, and other historical attractions are near West Chester. New York and Washington are easily accessible by car or train.

How to Reach West Chester

The Borough of West Chester can be accessed from all directions both by car and public transportation. Route 3, the West Chester Pike, leads directly into town from center-city Philadelphia. From the Pennsylvania Turnpike, motorists traveling west should take Route 202 south from the Valley Forge Interchange while those traveling east can arrive via Route 100 south from the Downingtown Interchange. From the south, Route 202 from Wilmington and Routes 100 and 52 from U.S. Route 1 all lead to West Chester.

Public transportation is available from Philadelphia and other nearby communities.

Information on public transportation and carpooling is available in Sykes Union Building, 610-436-2984.

Campus and Facilities

Description of the Campus

West Chester University's campus is a unique mixture of 19th century, collegiate Gothic, and contemporary architectural styles that complement each other to create a stately, beautiful atmosphere. Fifty-six buildings, comprising over 2.2 million square feet, are distinctly landscaped within 388 acres of rolling countryside, making the campus one of the aesthetic treasures of Southeastern Pennsylvania.

North Campus, an expansion of the original campus, occupies 97 acres at the southern boundaries of the Borough of West Chester. The North Campus contains the Quad area, which is surrounded by the University's oldest buildings—Philips Memorial, Recitation Hall, Anderson Hall, Ruby Jones Hall, and Old Library—three of which are constructed of green-hued serpentine stone that has given West Chester a unique character for many decades. The University also is known for the magnificent old trees that grace the campus.

An extensive building program from 1966 to 1976 produced several major facilities and utilities that equip the University for the needs of modern education. The Elsie O. Bull Center, the Francis Harvey Green Library, Mitchell Hall (Fine Arts), Main Hall (Humanities), Earl F. Sykes Union Building, and the Schmucker Science Center were major additions, along with six high-rise residence halls that span the western side of North Campus. Major additions to Sykes Union Building and the Science Center are currently under construction.

South Campus, which came into full use in 1970, is a 291-acre expanse of the gently rolling countryside of

Chester County. Located on South New Street three-quarters of a mile south of the original campus, South Campus includes the massive Health and Physical Education Center, which has won national acclaim for the quality and extent of its teaching, performance, and research facilities. John A. Farrell Stadium, playing and practice fields, and tennis courts surround the center. An 11-building apartment complex, providing housing for 500 upperclassmen, was completed in 1993. Also at South Campus is the 100-acre Robert B. Gordon Natural Area, which includes woodlands, fields, and a streamside habitat. This area has been conserved as a resource for the natural sciences.

Information Services

Information Services provides computing resources for a wide variety of users, both academic and administrative. Many of the University's administrative functions, such as registration, grade reporting, and billing depend heavily on the campus-wide transaction processing system that provides centralized access to University data from workstations located throughout the campus.

More importantly, computing is a vital instructional and research tool. Information Services offers students and faculty a wide range of computing resources, from mainframe to microcomputers, printers, plotters, graphics workstations, digitizers, and optical scanners. Many of these facilities are available at various campus locations, but the Academic Computing Center on the third floor, F. H. Green Library, serves as a focal point for instructional computing activity. A valid WCU Identification (ID) card is required to use the Academic Computing Center. For further information contact the Academic Computing Center at 610-436-3349.

Computing facilities throughout the campus are joined by the Mainframe Network and the Information Services Network. The Information Services Network offers electronic mail capabilities for all campus workstations, connection to SSHEnet/ PREPnet/Internet, Bitnet, and access to the University's main library catalogs.

The Information Services Network provides high-speed access to software applications (programming languages, spreadsheets, word processors, faculty developed programs, etc.) and electronic communication capabilities to workstations. This network and its facilities will be undergoing expansion during the 1993-94 year. Student laboratory facilities are available in the Academic Computing Center and in each of the eight residence halls.

Students interested in acquiring a working knowledge of several commonly used software packages are encouraged to enroll in the introductory computing course, CSC 101, offered by the Department of Mathematics and Computer Science.

Major hardware facilities include an IBM mainframe, numerous NTAS file servers, and IBM, MacIntosh, Apple, Zenith, NeXT, and DEC workstations. Letter-quality laser printers also are available for student use.

Information Services is located in 107 Elsie O. Bull Center, 610-436-2828.

Geology Museum

The West Chester University Geology Museum houses several collections of historic and scientific importance. Minerals from around the world, drawn from the collections of William Yocom and Ruth Bass, are on display. The collection of the late, well-known West Chester geologist Hugh McKinstry contains some of the finest specimens ever found in Chester County, as well as specimens from notable localities world-wide and collections of other significant 19th century amateurs. A special cabinet with ultraviolet light houses selected specimens from the extensive collection of fluorescent minerals of John Stolar, Sr. Other exhibits include fossils, the geology of Chester County, labels written by famous collectors and mineralogists, and a display created by the mineralogy class each fall. The museum is free and open to the public on weekdays. Contact the Department of Geology and Astronomy at 610-436-2727 for the specific schedule.

WCU Observatory

The Department of Geology and Astronomy maintains an astronomical observatory on the roof of the Schmucker Science Center. The main instrument is an 11.5 inch reflecting telescope that can be used in either the Newtonian or Cassagrain format. The auxiliary telescopes include a pair of four-inch refractors, one used to project solar images in white light and the other equipped with a hydrogen alpha solar filter. A five-inch Schmidt camera also can be mounted on the telescope assembly.

The telescope system can be used for basic observing, astrophotography, photometry, and spectroscopy. The observatory is equipped with a graphics computer system and a video camera for picture capturing capabilities. The observatory is used as an astronomical laboratory for astronomy courses and as a research area for independent study for junior- or senior-level research projects.

The observatory is open one night a week for all members of the college community for general viewing. Contact the department secretary at 610-436-2727 for day and times, as they may change from semester to semester.

WCU Planetarium

The Department of Geology and Astronomy operates the University Planetarium which houses a Spitz A-5 planetarium projector. The planetarium is used for astronomy class lectures and labs as well as for school and public programs. Approximately 70 schools and other groups attend the free programs each year, and annual attendance approaches 5,000. The planetarium dome is 10 meters in diameter, and the projector was rebuilt and upgraded by Spitz Space Systems in 1993. Persons interested in arranging group visits should contact the Department of Geology and Astronomy at 610-436-2727 for details.

Darlington Herbarium

The Darlington Herbarium, housed in Schmucker Science Center, is one of the most highly regarded historical collections of dried plant specimens in the East. Among the 20,000 specimens are plants collected by such famous explorers and botanists as Captain John Fremont, Thomas Nuttall, Sir William Hooker, C.S. Rafinesque, and George Englemann. More than 200 collectors from America's formative years of 1820 to 1850 are represented. The herbarium was the work of Dr. William Darlington (1782-1863), a member of the West Chester Cabinet of Science. Dr. Darlington was eminent in West Chester as a physician, educator, banker, businessman, historian, and botanist. His plants, however, were his

first love. A state park has been established in northern California to preserve a rare species of insectivorous plant named in his honor—*Darlingtonia.*

Robert B. Gordon Natural Area for Environmental Studies

The University has conserved 100 acres of natural woodland and field and stream-side habitat located on South Campus and uses it for several kinds of outdoor studies in the natural sciences. Dedicated in 1973, the area was named for Robert B. Gordon, faculty member and chairperson of the University's Department of Science from 1938 to 1963.

Francis Harvey Green Library

The Francis Harvey Green Library provides an excellent environment for study and research. The six-story facility has the capacity to house 500,000 books. It is furnished with a variety of seating areas including individual study carrels, faculty and graduate lounges, computer lab facilities, group studies, seminar rooms, and general reading areas.

The library has an increasingly important role in both teaching and research with its growing collection of more than one-half million volumes and subscriptions to nearly 3,000 journals. Augmenting this general collection with more than 350,000 titles is the micromedia collection, including books, periodicals, newspapers, and doctoral dissertations along with the facilities to read this material. The total resources of nearly 850,000 volumes compare favorably with other major public and private research libraries in West Chester's geographic area.

Additional noteworthy collections can be found in the library complex. An extensive holding of courses of study and textbooks, and a variety of audiovisual materials and equipment are held in the instructional materials center. Also available are separate collections for children's literature, government documents, and maps. The library is a selective depository for government documents and maps.

The Special Collections Room holds the Chester County Collection of scientific and historical books; the Normal Collection, publications by West Chester University faculty and alumni; the Ehinger Collection (historical books on physical education); the *Biographies of the Signers of the Declaration of Independence* by John Sanderson; and the Shakespeare Folios. The Philips Collection of Autographed books is housed in a specially designed room in the Philips Memorial Building.

West Chester students may take advantage of the library's many services, such as reference, computerized on-line literature searching, CD ROM databases, interlibrary loan, and photoduplication. The library's integrated automated system provides students and faculty access to the library's holdings via computer terminals. The on-line catalog may be searched at terminals located throughout the library and at remote terminals elsewhere on and off campus. To add to the cultural enrichment of the college community, the library schedules informative displays and art exhibits throughout the year.

Music Library

The Music Library is part of the University library. Located in Swope Hall, it houses an extensive collection of music, one of the largest of its kind in the Commonwealth of Pennsylvania. Its rapidly growing holdings include more than 27,000 scores (historical editions, collected works, opera, keyboard, and vocal and instrumental music) and more than 24,000 recordings (classical, folk, nonwestern, and popular). Listening facilities for 40 persons are available within the library.

Art Collections

The University's permanent art collection is made up primarily of gifts from interested art patrons, senior class purchases, and gifts from alumni. The Student Services Inc. (SSI) permanent art collection is on display at the Francis Harvey Green Library, Philips Memorial, and the SSI Art Gallery in the Sykes Student Union. The SSI collection consists of a number of important works, such as the watercolor, *Andress Place,* by Andrew Wyeth.

Historical Properties

Among a number of historical properties that came to the University through the Chester County Cabinet of Natural Sciences, a scientific society of the early 19th century, are the Anthony Wayne Letters, which include letters to Wayne from George Washington, Benedict Arnold, and others. The University also owns a grandfather's clock that belonged to Benjamin Franklin and Anthony Wayne's telescope, both of which came from the Chester County Cabinet. The Chester County Cabinet and the West Chester Academy merged to form the nucleus of the present University.

Center for Governmental and Community Affairs

Established in 1979, with offices in Ruby Jones Hall, the center is a campus service to local governmental and community organizations for research, faculty services, workshop sponsorship, intern placements, and resource materials. Center activities focus on facilitating community/campus interchange in furthering the use of University resources to solve governmental and community problems.

Speech and Hearing Clinic

The Speech and Hearing Clinic is located at 201 Carter Drive (across Matlack Street from the Bull Center parking lot). The clinic is operated by the Department of Communicative Disorders as a teaching and training facility for its undergraduate and graduate students. The clinic provides diagnostic and therapeutic services for persons with speech, language, and hearing problems. These services are provided free of charge to West Chester University students, faculty, and staff, and to students enrolled at Cheyney University. A fee is charged to others who wish to use the services of the clinic.

Admission to West Chester

West Chester University evaluates its applicants on the basis of scholarship, character, and potential for achievement in the programs to which they apply. The University operates on a modified rolling admissions policy, whereby applicants with the strongest academic credentials are given priority processing and notified as quickly as possible of their status. Other applicants are evaluated as their files become complete and may have final decisions deferred until later in the processing cycle, depending upon their individual academic profile. All decisions are communicated to applicants in writing. Qualified students of any age from all racial, religious, ethnic, and socio-economic backgrounds are welcome at West Chester. Studies may be pursued on a full- or part-time basis.

General Requirements for Admission of Freshmen

1. Graduation, with satisfactory scholarship, from an approved secondary school or approval by the Credentials Evaluation Division of the Pennsylvania Department of Education.
2. Either a satisfactory score on the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board (CEEB) or satisfactory scores on the tests given in the American College Testing Program (ACT). Applicants who graduated from high school more than five years ago do not need to submit test scores.
3. While not needed for admissions consideration, scores from the College Board's SAT II Writing Test are required for all entering freshmen for appropriate English placement. Applicants should arrange to take this examination so that the University receives the scores by the end of April for the fall semester and in early October for the spring term.

How and When to Apply for Freshman Admission

For application materials please write or call the Office of Admissions, West Chester University, West Chester, PA 19383, 610-436-3411.

Freshman applicants for the fall semester are urged to begin the application process early in their senior year of high school, preferably by December 1, despite the recommended May 1 deadline. Applicants for spring semester should complete an application by October 1. However, if enrollment limits are met before these dates, admissions will be closed.

Candidates will receive notification from the director of admissions as soon as possible after decisions are reached.

Freshman applicants who are denied admission on the basis of academics will not be permitted to enroll through University College but will be encouraged to consider a junior or community college as an alternative.

Policy on Early Admission

In exceptional circumstances, students with superior academic qualifications and unusually mature personal development are admitted as freshmen upon completing their junior year of secondary school. Students who, in the opinion of their guidance counselors, warrant consideration for early admission may obtain more information from the director of admissions. Early admission applications should be submitted in accordance with deadlines recommended for freshmen.

Arranging for Tests

Information about the SAT, SAT II Writing Test, and ACT may be obtained from high school guidance counselors. It is the student's responsibility to ensure that all required test scores are forwarded to the Office of Admissions.

Transfer Students

Individuals who have been enrolled in any postsecondary institution after graduation from high school and/or have attended West Chester University on a nondegree basis must apply as transfer students. Applicants whose secondary school credentials would not warrant admissions consideration as freshmen must complete the equivalent of one full academic year prior to attempting a transfer. A minimum cumulative Grade Point Average (GPA) of 2.00 is required for transfer consideration. However, the University's modified rolling admissions policy gives priority to applicants with the strongest academic credentials. In addition, some academic departments have established prerequisite course work and specific Grade Point Average requirements for admission. Specific information may be obtained from the Office of Admissions.

Transfer applicants for the fall semester should begin the application process early in the preceding spring semester, despite the recommended May 1 deadline. Spring semester applications should be completed by October 1. If enrollment limits are met before these dates, admissions will be closed.

Application Procedures for Students Transferring from an Accredited Institution

1. File an application, available from the Office of Admissions.
2. See that the director of admissions receives:
   a. An official transcript from all institutions attended. If preliminary (incomplete) transcripts are submitted, the student must see that final transcripts are filed later.
   b. Mid-term grades, if the student is currently enrolled elsewhere and is applying to West Chester for the following semester.
3. If a student has completed less than 30 semester hours of credit, he or she must supply SAT or ACT scores and a high school transcript. If results from the SAT II Writing Test are desired, the student will be notified by the Office of Admissions.

If a student is accepted, admission is contingent upon successful completion of current course work with at least a C average as documented by transcripts of all work attempted or completed.

Transfer students should read "Maintenance of Academic Standards" in the "Academic Policies and Procedures" section of this catalog.

Transcripts will be evaluated in accordance with the policies of the department to which the student seeks admission. After the student has been

admitted, he or she should work out an acceptable program of study in close consultation with an adviser in the major department.

Transfer applicants who are denied admission on the basis of academics will not be permitted to enroll through University College without the express approval of the Office of Admissions. Such approval may be rendered in the event of extenuating circumstances and only under certain agreed-upon conditions in accordance with University policy.

University Policies for Students Transferring from a Nonaccredited Institution

Applicants from collegiate institutions (including community colleges and junior colleges) that are *not accredited* by one of the six regional associations in the United States will be considered for admission if the applicant's cumulative index is 2.00 (C) or better.

The evaluation of courses listed on transcripts from an institution not accredited by one of the six regional associations will be made by the student's major department in consultation with the faculty dean and transfer credit analyst. All evaluations are subject to review by the provost and academic vice president.

International Students

Students from foreign countries may be considered for degree admission if, in addition to satisfying the general requirements, they also demonstrate proficiency in English. Standardized test scores from one of the following must be submitted with the application: Test of English as a Foreign Language (TOEFL), Scholastic Aptitude Test (SAT), or American College Test (ACT). Non-native English speakers are encouraged to submit the TOEFL; a minimum score of 550 is required.

International students are admitted only for the fall semester each year and applications must be submitted to the Office of Admissions by May 1. Accepted students must be able to verify their ability to fully meet all educational and living expenses before a U.S. Immigration Form (I-20) can be issued and admission to West Chester finalized. Because of the amount of time it takes for a student visa to be secured, international applicants are encouraged to complete the admissions process well in advance of the May 1 deadline.

Insurance Requirements for International Students

International students at West Chester University are required to carry adequate health and accident insurance. Insurance must be effective for all periods of time the student has been authorized to be in the United States by an immigration document issued by West Chester University.

Health and accident insurance policies must be purchased through a company that sells insurance in the United States. West Chester University has set minimum coverage standards which must be met by all insurance policies. Information about the minimum standards are available at the Center for International Programs Office, 610-436-3515.

To assure compliance with the insurance requirement, all international students must come to the Center for International Programs by September 15 of each academic year. There students may obtain information as to the amount of insurance required and the means of obtaining coverage to meet the insurance requirement.

Physical Examination Requirements

Applicants are not asked to submit a report of medical history until they have been accepted for admission and have committed to enroll. The form for the necessary health examination, which will be mailed to students, must be completed by a physician and returned to the University Health Center as soon as possible.

Students with Disabilities

West Chester University will make every effort to assure students with disabilities access to all classes required for their program of study and will endeavor to remove all obstacles to a fulfilling, comprehensive university experience.

The Office of the Assistant Vice-President for Academic Affairs should be advised of any disabilities to arrange suitable accommodations. Additional information may be obtained by calling 610-436-3416.

Second Baccalaureate Degree

An individual may pursue a second baccalaureate degree at West Chester University after earning the first baccalaureate degree either at West Chester or another institution. Such an individual must apply for admission through the Office of Admissions as a transfer student.

Admission of College Graduates Seeking Certification

College graduates who wish to obtain teaching certification should consult with the Certification Office in the School of Education, 610-436-2426.

Readmission of Former Students

Students who have withdrawn from, or who for other reasons have not matriculated at, West Chester for two or more consecutive semesters are classified as "inactive" and must request an application for readmission from the Office of Admissions. After an absence of only one semester, students wishing to return should contact the Office of the Registrar and their department advisers. Those who have attended any institutions of higher learning since leaving West Chester must request those institutions to forward transcripts of their records to the Office of Admissions, West Chester University, West Chester, PA 19383.

Readmitted students are bound by the requirements in the major, minor, and cognate areas at the time of readmission, except where permission is granted by the respective department.

Students intending to enroll in student teaching in the first semester of readmission must file an application for student teaching with the individual departments at least four months before their expected readmission. See also "Student Teaching" in the section entitled "Academic Affairs."

All readmission applications, including all supporting documents, are to be filed by August 1 for the fall semester and December 1 for the spring semester.

Office of Admissions Staff

Marsha Haug—Director of Admissions
Fran Cubberley—Associate Director
Eileen Merlin—Assistant Director
Joseph Bradley—Assistant Director
Kathy Hein—Assistant Director
Jule Thomas—Assistant Director
Linda Hoffman Delack—Assistant Director

Fees and Expenses

Special Note: The fees listed below reflect charges at press time. For up-to-date information on fees at any given time, contact the Office of the Bursar, 610-436-2552.

Fees and expenses are subject to change without notice. Fees shown here are in effect for the academic year 1993-94, unless otherwise noted.

Changes for 1994-95, if approved, would occur after the printing of this catalog.

Unless otherwise specified, fees may be paid by Visa, MasterCard, check, or money order made payable to West Chester University. The cancelled check, money order record, or charge card billing serves as a receipt.

Undergraduate Tuition for Legal Residents of Pennsylvania

Full-time students (between 12-18 credits) $1477.00 per semester
Part-time students (11 credits or less), or per credit for each credit over 18 $123.00 per credit

Undergraduate Tuition for Out-of-State Students

Full-time students (between 12-18 credits) $3676.00 per semester
Part-time students (11 credits or less), or per credit for each credit over 18 $306.00 per credit

Community Center Fee

The community center fee is a mandatory charge for the use of Sykes Student Union Building.

1–6 credits $ 5.00 per semester
7–9 credits $10.00 per semester
10 credits or more $20.00 per semester

Health Center Fee*

The health center fee is a mandatory charge for the use of the University Health Center.

Full-time students only (12 credits or more) $40.00 per semester
Part-time students (11 credits or less) $16.00 per semester

Student Services, Inc. (SSI) Fee

The SSI fee is a mandatory charge to fund student activities, services, clubs, and sports.

Full time (12 credits or more) $65.00 per semester
Part time (11 credits or less) $20.00 per semester

Educational Services Fee

The educational services fee is a mandatory charge for all students. The fee is charged in lieu of specific department charges.
Full time (12 credits or more) $100.00 per semester
Part time (11 credits or less) $40.00 per semester

Housing Fee*

North Campus Residence Halls – This fee entitles the student to occupancy of a standard double room in any North Campus residence hall with one roommate.
Per student $1,290.00 per semester

South Campus Apartment Complex – This fee entitles the student to occupancy of a four- or five-person apartment with the following bedroom occupancy:

Single occupancy bedroom (per student) $1,625.00 per semester
Double occupancy bedroom (per student) $1,450.00 per semester

Students in the North Campus residence halls losing their roommates who do not have another roommate assigned to them will be assigned a roommate, relocated, or charged a private room fee of $25.88 per week for every week that they occupy the room alone. These options are usually only available during the spring semester.

Meal Fee*

Plan 1: 14-Variable Program $764.00 per semester

(Mandatory for students in the North Campus residence halls)

This convenient program entitles resident, off-campus, and commuter students to any 14 out of the 19 meals served Monday through Sunday and includes a flexible fund of $100.00. The flexible fund aspect of the 14-variable board plan gives students the flexibility of making up to $100.00 in purchases at any dining service location. Students may add to their flexible fund account at any time in $25.00 increments.

With flexible funds students can:
- Supplement meal entitlements
- Treat friends or family members to meals
- For a late night snack, have a freshly made ITZA PIZZA delivered to the residence hall
- Purchase items from the Convenience Store

Plan 2: Flexible Fund Program

This program is designed for South Campus apartment complex, off-campus and commuter students, faculty, and staff. A minimum of $100.00 can be placed in a flexible fund account that can be accessed by an ID card. The program can be used in the Lawrence Food Court, Campus Corner, Convenience Store, or in the Sykes Ram's Head Deli. Faculty and staff may use their flex dollars in the University Club as well. With this program, there is no need to carry cash for meals. The flexible fund may be increased by $25.00 increments at any time during the semester.

Plan 3: 10-Variable Program $652.00 per semester

This plan is designed for those South Campus apartment complex, off-campus, and commuter students who do not want the burden of shopping, cooking, and cleaning up during the busy school week. This plan entitles participants to 10 out of the 19 meals served Monday through Sunday and includes a flexible fund of $50.00 that can be used as described in Plan 1.

Plan 4: 5-Variable Program $473.00 per semester

This plan is designed for South Campus apartment complex, off-campus, and commuter students who wish to have the convenience of meals on campus. This plan entitles participants to five out of the 19 meals served Monday through Sunday and includes a flexible fund of $50.00 that can be used as described in Plan 1.

For those students in residence halls, the meal plan cost has already been included in the University billing. South Campus apartment complex, off-campus, and commuter students can sign up for one of these meal plans by applying at the Office of the Bursar in the E.O. Bull Center.

*Effective fall 1994

Any flexible funds left at the end of the first semester will transfer to the second semester. Any flexible funds remaining at the end of the second semester will be forfeited.

How the Meal Plan Works

A West Chester University identification card will be encoded to access a student's dining service account.

A meal or flexible funds will be deducted from the balance automatically when the card is presented to the cashier.

This identification card will serve as a ticket to the offerings at Lawrence Food Court, Campus Corner, Convenience Store, and Sykes Ram's Head Deli.

Lost or Stolen ID Cards

Lost or stolen cards should be reported immediately in person to the Information Systems Office in order to prevent someone from misusing the lost ID. A temporary ID can be purchased at this time for $5.00. (This fee is refunded if it is the first time the student is getting a temporary card and the temporary card is returned before its expiration date.) Office hours are Monday through Friday, 8 a.m. to 6 p.m. The Information Systems Office is located at Lawrence Center, 610-436-3129.

Student Union Expansion Fee

Students pay a mandatory Student Union Expansion fee as follows:

Full Time	Part Time	Summer
$55.00	$20.00	$10.00

International Student Services Fee

International students are assessed a fee of $25.00 per semester to support the services provided to them by the International Program Office.

Payment of Fees

Each semester, students have three opportunities to schedule for classes and pay their bills.

(1) Students may schedule during the main scheduling period, which is held during the prior semester. A bill will be mailed to these students four to six weeks before the semester begins. The bill must be paid in full by the due date. Students who are receiving approved financial aid awards that fully cover or exceed the amount of their bills do not have to pay, but they must submit to the Office of the Bursar a full Financial Aid Waiver Form, which will be enclosed with their bills. Students who cannot pay their bills in full by the due date may apply for deferred payment (see "Deferred Payment Policy" below).

(2) Students who do not schedule prior to the mail payment deadlines may schedule and pay in person prior to the start of the semester. In this instance, payment must be made at the time of scheduling; no bill will be sent in the mail.

(3) Students who do not take advantage of either of these scheduling opportunities, or who fail to pay their bills as outlined above, must attend late registration. Students at late registration will be expected to pay their bills at the time that they schedule.

Failure to meet the payment deadlines as set forth above could result in cancellation of the student's schedule. In order to have the schedule reinstated, the student would have to pay his or her bill in full as well as a $35.00 late registration fee.

Students who owe money to the University will not be able to schedule for future semesters, will not receive transcripts, and will not be cleared for graduation. The University also may, at its discretion, invoke any other penalty appropriate for a particular case in which money is owed to the University.

Deferred Payment Policy

The University extends deferred payment privileges to all students who are in good financial standing and have not defaulted on a previous payment plan. The fee charged for this service is $50.00 annually. For more information about the plan offered, contact the Office of the Bursar at 610-436-2552.

Uncollectible Check Policy

A fee of $25.00 is charged for any check returned to the University for insufficient funds, stopped payment, or closed account. The University may, at its discretion, charge this fee for any check returned to it for any other reason.

The check will be returned to the student upon its replacement through cash, cashier's check, MasterCard, VISA, or money order. Students who have two or more checks returned against their accounts will no longer be able to make payment by personal check; all future payments must be made by cash, certified check, MasterCard, VISA, or money order.

Refund Policy

All requests for refunds for dropped or cancelled courses, or for withdrawals, must be made in writing or in person to the Office of the Registrar. Refunds are not automatic; it is the student's responsibility to initiate a refund request.

Individual fees will be refunded according to the policies described below.

Tuition – in full prior to the first day of the semester; after the first day of the semester, refunds are as follows:

1st or 2nd weeks of class	80% refund
3rd week of class	70% refund
4th week of class	60% refund
5th week of class	50% refund
After fifth week of class	No refund

The SSI fee will be prorated if the student withdraws from the University. Fees are not adjusted if the student goes from full time to part time.

Students who are in their first term of enrollment at WCU and who have received federal financial aid will receive prorated refunds based on federally mandated requirements. **The refund policy does not affect the timeline for W, WP, and WF grades as described under "Withdrawing From a Course" (see page 41).**

Housing Fee – in full prior to the first day of the semester; after the first day of the semester, prorated refunds are made on an individual basis through the Office of Residence Life.

Meals Fee – in full prior to the first day of the semester; after the first day of the semester, prorated refunds are made on an individual basis through the Office of Residence Life for resident students, and through the Office of the Bursar for commuter students.

Community Center, Health Center, and Educational Services Fees – in full prior to the first day of the semester or for cancelled courses; nonrefundable after the first day of the semester for dropped courses or withdrawals.

Appeals concerning the refund policy are made to the University registrar. Further appeals, if necessary, may be made to the Appeals Committee.

Other Fees

Application Fee. $25.00 is charged to all prospective students for the processing of their applications to the University. The fee is nonrefundable

and is not credited to the student's account.

Nondegree Student Application Fee. Nondegree students are charged a one-time $15 initial processing fee.

Acceptance Fee. $100.00 is paid by all newly accepted and readmitted students as proof of intention to enroll at the University. It is credited against the student's tuition and is nonrefundable if the student decides not to attend.

Housing Deposit. $100.00 is charged to all new and returning students who wish to live in the residence halls. It is credited against the student's housing fee and is nonrefundable if the student decides not to live on campus.

Late Registration Fee. $35.00 is charged to all students who schedule and pay at late registration and to all students who pay their bills after the deadline set for those bills. This fee is nonrefundable.

Credit by Examination Fee. A charge is made to all students who register for a Credit by Examination through the Office of the Registrar. Each examination scheduled costs $25.00.

Portfolio Assessment Fee. Equal to 50% of the per credit hour rate, this fee is charged to have a faculty member assess a student's prior knowledge in a particular course.

Course Audit Fee. Students who audit courses pay the same fees as students taking the courses for a letter grade.

Damage Fee. Students are charged for damage or loss of University property. This fee varies, depending on the extent of the damage.

Identification Card Fees. The University charges a $2.00 fee to issue an identification card to each full- or part-time student. If this card is lost, stolen, or damaged, the student will be charged $5.00 for a replacement card. This fee is payable at the Student Services, Inc. Office.

Parking Fees. The University charges a nonrefundable parking fee to students who are eligible to purchase a decal to use University parking lots. The current parking fee is $20 per year; however, the fee effective for fall 1994 has not yet been established.

Registration forms are available at the Department of Public Safety. A violation of University parking regulations is charged $5.00 per issued ticket.

Music Instrument Rental Fees. Each student renting a musical instrument for a semester is charged $20.00 per instrument. Every student using a pipe organ for practice for one period each weekday is charged $36.00 per semester.

Lost Key Replacement. Students who lose the key to their dormitory room are charged a nonrefundable fee of $25.00 to replace the lock.

Transcript Fee. The fee for transcripts is $3.00 per copy. Transcript request forms are available in the Office of the Registrar. Immediate transcripts are $5.00 per request.

Commencement Fee. The University charges $45.00 to all students enrolled in a degree program who will have fulfilled their degree requirements by the end of the semester. This fee is paid after the student completes a Graduation Application Form in the Office of the Registrar and is approved for graduation.

Placement Credentials Fee. This $10.00 charge covers the cost of registration, development, and updating a student's credentials file in the Career Development Center. The fee entitles the student to five mailings of credentials, as well as a personal copy.

Fees for Health and Physical Education Majors. Students in the B.S. degree programs in health and physical education must purchase uniforms at the University Bookstore. All students must be in proper uniform for activity classes.

Financial Aid

The financial aid program at West Chester University provides financial assistance and counseling to students who can benefit from further education, but who cannot obtain it without such assistance. Financial aid consists of gift aid in the form of scholarships or grants, and self-help aid in the form of employment or loans. The main responsibility for meeting educational expenses rests with students and their families. Financial aid is a supplement to family contribution and is to be used for educational expenses.

Eligibility for financial aid, with the exception of some private scholarships and the Parent Loan Program, is based on demonstrated financial need. Family income, assets, and family size influence a student's demonstrated financial need.

All documents, correspondence, and conversations among the applicants, their families, and the Office of Financial Aid are confidential and entitled to the protection ordinarily arising from a counseling relationship.

In order to receive financial aid, the student must:

1. Be accepted for admission as a degree student enrolling at West Chester University, or, in the case of a student already attending the University, be enrolled and making satisfactory academic progress as a degree student. See the section entitled "Satisfactory Academic Progress Policy for Financial Aid" for a more detailed explanation of this requirement.
2. Submit a Free Application for Federal Student Aid before March 1 for priority consideration. This application will be used to determine demonstrated financial need for the student. All students are encouraged to complete this application.
3. Submit, in the case of a transfer student, a Financial Aid Transcript from all previously attended postsecondary educational institutions. This transcript may be obtained through the Office of Financial Aid. Submit this transcript even if no aid was received at those institutions.
4. Apply for the state grant program in his or her state of legal residence.
5. Submit any other requested documentation concerning financial and family circumstances that may be requested by the Office of Financial Aid, or any agency that administers financial assistance programs. Financial aid applicants may be required to submit copies of their IRS forms, and/or their parents'

forms, or various other income-related documents.

Submission of the above does *not* automatically entitle a student to receive financial aid. The Office of Financial Aid follows the regulations established by the federal government in awarding aid. Aid applicants are ranked according to unmet need (based on budget, federal and state grants, and expected family contribution), and available funds are offered to the neediest students first. *Students must apply for financial aid each academic year.*

Unless otherwise specified, requests for scholarships, grants, loans, and employment opportunities described in this catalog should be made to the Office of Financial Aid. Application forms for state and federal grants may be obtained from the Office of Financial Aid at West Chester University and from the offices of most high school guidance counselors. Questions concerning financial aid may be directed to the Office of Financial Aid, 138 Elsie O. Bull Center, West Chester University, West Chester, PA 19383, 610-436-2627. Office hours are from 8:30 a.m. to 4:00 p.m., Monday through Friday.

Satisfactory Academic Progress Policy for Financial Aid

Each student will be reviewed for satisfactory academic progress annually after the spring semester. A student must meet the following requirements in order to continue to receive Title IV financial aid:

1. Successfully complete the minimum number of credits during the prior academic year as shown below:

Credits Attempted Per Semester	Minimum Successfully Completed Per Semester
12 or more	12
9 to 11.5	9
6 to 8.5	6
Fewer than 6	All

2. Have a cumulative grade point average (GPA) of at least 2.00 by the end of the student's second academic year of attendance.

A student who is not making satisfactory academic progress at the time of the annual review will be evaluated again after the summer and fall semesters.

Credits earned during the summer following an academic year will be used to make up a credit deficit during the review for financial aid satisfactory academic progress. The Office of Financial Aid reviews the "official permission of the University to enroll or continue enrollment as a degree student" requirement at the beginning of each semester. In other words, if the student moves from "degree" to "nondegree" between the fall and spring semesters, the student will not be maintaining satisfactory academic progress, and spring financial aid will be rescinded. This particular rule is NOT appealable.

Courses taken at other institutions will be used in the determination of satisfactory progress only if they are accepted for transfer to West Chester and count towards the student's degree. The student is responsible for submitting transcripts and evaluations to the Office of Financial Aid.

In addition to the above requirements, students will be expected to complete their four-year undergraduate degree programs within five years. Therefore, full-time undergraduates may receive up to, but not more than, 10 semesters of aid. Students enrolled on a part-time basis may receive the prorated equivalent of 10 full-time semesters of aid. For additional information about this, contact the Office of Financial Aid.

Failure to maintain satisfactory academic progress according to these standards will result in the loss of Federal Title IV financial aid for at least one semester, or until such time as the student is again maintaining satisfactory academic progress.

DEFINITIONS:

CREDITS ATTEMPTED: Credits for which a grade of A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, F, P, W, Y, WF, WP, I, or NG has been received.

SUCCESSFULLY COMPLETED CREDITS: Credits for which a grade of A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, or P has been received. Grades of NG, AU, CRE, W, WP, WF, and I do not count as successfully completed credits.

FEDERAL TITLE IV FINANCIAL AID: Federal Pell Grant, Federal Stafford Loan (FSL), Federal Parent Loan for Undergraduate Students (Federal PLUS), Federal Work-Study (FWS), Federal Perkins Loan, and Federal Supplemental Educational Opportunity Grant (FSEOG).

APPEALS TO THE SATISFACTORY ACADEMIC PROGRESS REQUIREMENTS:
Appeals to the satisfactory academic progress requirements must be made in writing, requesting and fully explaining the reasons for the appeal. The Appeals Committee may request a personal interview with the student. The decision of the Appeals Committee will be based on the merits of the appeal and will be final. Appeals, when granted, will be for ONE SEMESTER ONLY. Students who are granted appeals will be reviewed for the maintenance of satisfactory academic progress at the end of the "appeal" semester, with progress determined by the credits attempted and earned during the appeal semester. In most circumstances, only ONE appeal will be granted during the course of the student's academic career at West Chester. An appeal must be filed by the end of the drop/add period of the semester for which the appeal is requested.

The Federal Title IV satisfactory academic progress policy also applies to state grant (not PHEAA) programs that include the maintenance of progress as an eligibility requirement.

PHEAA STATE GRANT SATISFACTORY ACADEMIC PROGRESS IS DIFFERENT FROM FEDERAL TITLE IV FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS. IT IS DEFINED AS SUCCESSFULLY COMPLETING A MINIMUM OF 24 CREDITS FOR EACH TWO SEMESTERS OF PHEAA STATE GRANT AID RECEIVED AND IS ESTABLISHED BY PHEAA.

Withdrawal/Enrollment Change and Aid

Students who officially withdraw or change their enrollment status may be entitled to a refund of certain fees, according to West Chester University's policy. (See section entitled "Fees and Expenses.") If that student has been awarded financial aid for the semester in which the withdrawal or enrollment change occurs, a portion of the refund will be *returned to financial aid program funds.*

Financial aid refunds due to withdrawals or enrollment changes are processed in accordance with federal, state, and awarding agency guidelines and regulations. A student considering withdrawal or an enrollment status change should consult with the Office of Financial Aid to determine the impact of that action on current and future financial aid.

Student Consumer Rights and Responsibilities

You have the right to ask a school:

1. The names of its accrediting organizations.
2. About its programs; its instructional, laboratory, and other physical facilities; and its faculty.
3. What the cost of attending is and what its policies are on refunds to students who drop out.
4. What financial assistance is available, including information on all federal, state, local, private, and institutional financial aid programs.
5. What the procedures and deadlines are for submitting applications for each available financial aid program.
6. What criteria it uses to select financial aid recipients.
7. How it determines your financial need. This process includes how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc. are considered in your budget. It also includes what resources (such as parental contribution, other financial aid, your assets, etc.) are considered in the calculation of your need.
8. If you have a loan, what the interest rate is, the total amount that must be repaid, the length of time you have to repay the loan, when payments are to begin, and any cancellation and deferment provisions that apply.
9. If you are offered a work study job, what kind of job it is, what hours you must work, what your duties will be, what the rate of pay will be, and how and when you will be paid.
10. To reconsider your aid package, if you believe a mistake has been made.
11. How the school determines whether you are making satisfactory academic progress, and what happens if you are not.
12. What special facilities and services are available to the disabled.

You have the responsibility to:

1. Review and consider all information about a school's program before you enroll.
2. Pay special attention to your application for student financial aid, complete it accurately, and submit it on time to the right place. Errors can delay your receipt of financial aid.
3. Provide all additional documentation, verification, corrections, and/or new information requested by either the Office of Financial Aid or the agency to which you submitted your application.
4. Read and understand all forms that you are asked to sign and keep copies of them.
5. Accept responsibility for the promissory note and all other agreements that you sign.
6. If you have a loan, notify the lender of changes in your name, address, or enrollment status.
7. Perform in a satisfactory manner the work that is agreed upon in accepting a college work study job.
8. Know and comply with the deadlines for application for aid.
9. Know and comply with your school's refund procedures.

THE FOLLOWING IS A BRIEF DESCRIPTION OF THE FINANCIAL AID PROGRAMS AVAILABLE AT WEST CHESTER UNIVERSITY.

Federal Work Study Program

Federal work study is an employment program that allows students to work part time on campus. Application is made through the Free Application for Federal Student Aid. The priority deadline is March 1.

Federal Perkins Loan Program

The Federal Perkins Loan Program is administered by the Office of Financial Aid for students who demonstrate financial need. The cumulative limit for borrowing as an undergraduate student is $15,000 ($3,000 per year). The cumulative limit for borrowing as a graduate student and undergraduate student is $30,000. The interest rate is 5 percent and begins to accrue when repayment commences—nine months after the student terminates his or her education. There are deferment privileges for students who enter the armed services, Peace Corps, or VISTA after graduation. There are cancellation privileges for special education teachers and teachers in certain school districts. Application is made through the Free Application for Federal Student Aid. Priority deadline is March 1.

Federal Stafford Loan Program

This loan program, formerly the Guaranteed Student Loan Program, operates with the cooperation of private lenders (banks, credit unions, etc.). Loans for students who demonstrate need are subsidized (no in-school interest payments); loans for students who do not demonstrate need are unsubsidized (in-school quarterly interest payments required). Annual loan limits are $2,625 for first-year students, $3,500 for second-year students, and $5,500 for undergraduate students who have completed two years. Independent students may borrow additional unsubsidized funds: up to $4,000 per year for their first two years, and up to $5,000 per year after they have completed two years. The academic level maximum amounts are *not guaranteed*. The loan amount is influenced by the receipt of other aid. The interest rate for first-time borrowers is variable, not to exceed 8.25 percent. It begins to accrue when repayment commences—six months after the student terminates his or her education or drops below half-time status. There are deferment privileges for students who enter the Peace Corps, ACTION programs, or the Commissioned Corps of the Public Health Service. Applications are secured at the lending institution. Students should allow 10 weeks for processing and apply by May 31. Funds for first-year students may not be disbursed until 30 days after the start of the semester. The Federal Stafford Loan application and the Free Application for Federal Student Aid must be filed.

Federal Parent Loan for Undergraduate Students (PLUS)

The Federal PLUS program operates through private lenders. Parents may borrow up to the cost of education minus other aid for each dependent student attending a postsecondary educational institution for each academic level. The interest rate is variable, not to exceed nine percent, and repayment commences 60 days after disbursement of the loan funds. Applications are secured at lending institutions.

Short-Term Emergency Loan

Students in need of funds to cover unusual or emergency education expenses may contact the Office of the Bursar concerning the Short-Term Emergency Loan Program. The maximum loan is $200.

Federal Pell Grant

This is the federal grant program. All students are encouraged to apply for a Federal Pell Grant. Students receive notification of eligibility in the form of a Student Aid Report that *must be submitted* to the Office of Financial Aid. The maximum award is $2,300 per year. Interested students must file the Free Application for Federal Student Aid. Deadline is May 1 of the current academic year.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG program is federally funded and administered by the Office of Financial Aid. A student must demonstrate financial need and be an undergraduate. Students must file the Free Application for Federal Student Aid. Deadline is March 1.

State Grants

PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY (PHEAA) GRANT. The Commonwealth of Pennsylvania, through PHEAA, makes state grants available to students who demonstrate financial need, are full-time undergraduates, and are Pennsylvania residents. PHEAA requires that students successfully complete at least 24 credits each academic year in which a PHEAA Grant is received. Students must file the Pennsylvania State Grant and Federal Student Aid application. Deadline is May 1.

The Commonwealth of Pennsylvania has entered into reciprocal agreements with the following adjacent states: Delaware, West Virginia, Ohio, and Maryland. Residents of these states who wish to attend West Chester University are permitted to use state grants from their home states for educational expenses at West Chester. Some other states not adjacent to Pennsylvania may permit their residents to use state grants for attendance at West Chester University. Students should contact the agency for higher education in their states for more information.

Scholarships and Awards

WEST CHESTER UNIVERSITY ALUMNI ASSOCIATION SCHOLARSHIP FUND. A scholarship fund was established by the Alumni Association of West Chester University in 1974 to benefit the students of West Chester University. The criteria for selection are scholarship, leadership, character, and need. Scholarships may be awarded to sophomores, juniors, and seniors. Applications are available from the Office of Financial Aid or the Office of Alumni Relations. The awards are generally made on Alumni Day each year and are applied to the students' course fees for the next academic year. Scholarship amounts vary.

GERALDINE DALEY ANDERSON SCHOLARSHIP. This fund was established to honor Mrs. Geraldine Daley Anderson '34 by a gift from her husband, Robert S. Anderson, M.D. The awards from the fund are restricted to physical education majors who are graduates of high schools in Lackawana, Luzerne, and Wyoming counties in Pennsylvania. Students also must have financial need and demonstrate academic achievement. Preference will be given to women students. The value of the award varies but will be no less than $300. Applications may be obtained from the Office of Financial Aid.

SANDRA ALESIA ATKINS MEMORIAL SCHOLARSHIP. This scholarship is awarded annually as a memorial to Sandra Alesia Atkins, a member of the class of 1981, to an outstanding music student from Overbrook High School in Philadelphia who enrolls at West Chester University as a candidate for the B.S. degree in music education. The recipient will be selected by the School of Music upon recommendation of the Overbrook High School Music Department.

JUSTO B. BRAVO SCHOLARSHIP IN CHEMISTRY. This award is available to a full-time student majoring in chemistry. Applications are made to the Department of Chemistry.

LAURY SAMUEL BROKENSHIRE SCHOLARSHIP. This scholarship is presented annually as a memorial to Laury Brokenshire '59 by his parents, Mr. and Mrs. James R. Brokenshire of Reading. It is awarded to an outstanding junior class music student selected by the School of Music faculty.

CAVALCADE OF BANDS SCHOLARSHIP. This award is sponsored jointly by the Cavalcade of Bands Association and the School of Music. The recipient(s) must be admitted in good standing to the music program at West Chester University and selected by the director of the winning band(s) in each category of the American and Yankee Conferences. The awards are determined annually. Normally, one student from each of the four winning bands will be selected to receive a $1,000 tuitional scholarship.

ROBERT L. CARL MEMORIAL KEYBOARD SCHOLARSHIP. Two scholarships are awarded to freshman keyboard majors, in honor of the late Robert L. Carl, former chairperson of the Department of Keyboard Music, who taught piano at the University from 1946 until 1971. Applications are made to the dean of the School of Music.

PAUL E. CARSON BAND SCHOLARSHIP. This award has been made possible by the generosity of Paul E. Carson, former chair of the Instrumental Department and a member of the University faculty for 28 years. Scholarships are awarded to incoming freshmen majoring in band instruments.

VINCENT D. CELENTANO MEMORIAL SCHOLARSHIP. This scholarship is awarded as a memorial to Dr. Vincent D. Celentano, musician, scientist, and Explorer Committee member. Eligible freshmen in the School of Music must be affiliated with Exploring or the Senior Branch of Scouting.

ELVA L. BOYER CHAMBERLIN '31 SCHOLARSHIP. This scholarship is awarded to an academically qualified student who demonstrates financial need, with preference given to a student studying in the field of education. Awards are made by the University Scholarship Committee based upon recommendations from the director of financial aid.

CLASS OF 1920 SCHOLARSHIP. This fund was established by the Class of 1920 through a gift on the occasion of the class's 65th reunion. The award is made to a student who has completed one year of study at the University or to an outstanding freshman. Documented financial need and demonstrated leadership qualities are essential. The amount will be no less than $500. Application forms are available through the Office of Financial Aid.

CLASS OF 1937 SCHOLARSHIP. This scholarship fund was established by the Class of 1937 as a golden anniversary gift to West Chester University on the 50th reunion of the class. The scholarships are awarded to entering freshmen based on scholarship, leadership, char-

acter, and financial need. The awards are generally made on Alumni Day each year and are applied to tuition fees for the academic year.

Applications are available from the Office of Development and Alumni Relations or the Office of Financial Aid. Selection of recipients will be made by the Scholarship Committee of the Alumni Board of Directors.

CLASS OF 1938 SCHOLARSHIP. This fund was established by the Class of 1938 as a Golden Anniversary Gift to the University at the 50th reunion of the class. The award is to be made to a student who has successfully completed one academic year at West Chester and is based on leadership, scholarship, character, and financial need. Application forms are available through the Office of Financial Aid.

CLASS OF 1957 SCHOLARSHIP. This fund was established by the Class of 1957 to assist entering freshmen with demonstrated exemplary achievement in mathematics or science and English. Application forms are available through the Office of Financial Aid.

CLASS OF 1970 SCHOLARSHIP. This fund was made available through the Class of 1970 on the occasion of the 15th reunion of the class in 1985. The award is to be made to a student who has demonstrated academic achievement and good University citizenship. The amount is no less than $100. Application forms are available through the Office of Financial Aid.

JOHN T. COATES HORN SCHOLARSHIP. This scholarship was established in 1987 as a memorial to John T. Coates by his wife and daughters. It is awarded to a talented incoming freshman whose major performing area is the French horn.

GRACE COCHRAN RESEARCH ON WOMEN AWARD. An annual $100 award in each division, graduate and undergraduate, for the best research on women. The award, sponsored by the Institute for Women, is given on Research on Women Day held in April of each year. Dr. Cochran, an eminent teacher and scholar, graduated from the West Chester Normal School in 1906.

TIMOTHY DAVIDSON '32 SCHOLARSHIP. This scholarship is awarded to a first-year student based on the recommendation of the Office of Admissions.

PHILLIP B. DONLEY AWARD. This scholarship was established by the athletic training alumni and is awarded to a junior majoring in athletic training. The recipient will be chosen based on GPA, clinical evaluations, and service (professional, University, and community).

RALPH H. DeRUBBO ENDOWED SCHOLARSHIP FUND. This scholarship was created by Ralph H. DeRubbo '47 to assist a student in financial need.

PAUL DOUGLAS TEACHER SCHOLARSHIP PROGRAM. This program offers awards of up to $5,000 per year to students who are pursuing a course of study leading to certification as a teacher at the elementary or secondary level and who are willing to enter into a signed agreement with PHEAA that obligates them to teach two years of elementary or secondary school for each year they receive a scholarship. To be eligible, students must be or have been in the top 10 percent of their high school graduating class. Applications are available at high school guidance offices or the Office of Financial Aid.

FREDERICK DOUGLASS MINORITY STUDENT SCHOLARSHIP. Scholarships are available to minority students who are enrolled full time. Applicants must demonstrate their ability to make a positive contribution to the University and/or community through active involvement. Applications and guidelines are available during the spring semester in the Office of Financial Aid.

DR. ROBERT E. DRAYER MEMORIAL AWARD. An annual award for the senior who graduates with the most distinguished record in history, in memory of Dr. Robert E. Drayer, assistant professor of history, who died in 1968. The Department of History selects the recipient.

FACULTY AWARD. A certificate presented annually to a graduating senior in the Department of Nursing who, in the opinion of the department faculty, demonstrates "outstanding ability and exceptional commitment to professional nursing."

FACULTY SCHOLARSHIP FUND. Annual awards of $200 each are made in May to undergraduate students on the basis of academic ability and financial need. Applications are made to the Faculty Scholarship Fund.

BONNIE EVANS FEINBERG SCHOLARSHIP. This scholarship was established by Bonnie Evans Feinberg, a member of the class of 1963, and is awarded by the University Scholarship Committee to an incoming, first-year student from a middle-class, multiple-sibling family who is a solid "B" or better student. The scholarship is renewable as long as the student maintains a 3.0 GPA.

WEST CHESTER UNIVERSITY FOUNDATION GRANT. The West Chester University Foundation has modest funds available for grants to needy students. Any student who is about to complete, or has completed, his/her freshman year may apply. In evaluating applications, the foundation will give special attention to those who are active in all facets of University life. Each year, applications for the fall semester should be submitted by May 1, and for the spring semester by December 1.

MELVIN L. FREE SCHOLARSHIP. This scholarship was established by Melvin L. Free, a member of the class of 1932. Recipients are selected by the Office of Financial Aid.

H. RAYMOND SR. AND MAY GRAYSON FRIDAY MEMORIAL SCHOLARSHIP. This scholarship was established by Dr. Raymond Friday, professor of vocal and choral music, in memory of his parents. It is awarded annually to a freshman voice major who is selected in the spring semester on the basis of scholarship and vocal achievement.

JOHN J. FURLOW '55 SCHOLARSHIP. This scholarship was established in 1990 by friends and colleagues of John Furlow to provide financial assistance to a junior or senior health and physical education major. The recipient must have demonstrated personal growth and commitment to his/her career and demonstrated service or care to others in this or a related field. Application procedures are available through the Department of Health and Physical Education Scholarship Committee.

MIRIAM GOTTLIEB PIANO SCHOLARSHIP. This award has been made possible through the generosity of Mrs. Miriam Gottlieb, who was a member of the University's Department of Keyboard Music faculty from 1946 until her retirement in 1975.

MICHAEL C. GREY AWARD. This award was established in memory of Michael C. Grey '89 by Barbara J. Brown, an alumnus and former faculty/staff member.

THE JOHN GUTSCHER MEMORIAL SCHOLARSHIP IN MUSIC EDUCATION. This award, presented for the first time in 1988, is based on music student teaching excellence, academic excellence, and financial need. The award was established by the family of John Gutscher, a former School of Music faculty member. The student or students are selected by the music student teaching supervisors with the approval of the Department of Music Education.

EVELYN H. HALDEMAN SCHOLARSHIP. This scholarship was established by Evelyn H. Haldeman, a member of the class of 1944. Awards are made by the University Scholarship Committee to students based on need, above-average scholarship, and citizenship.

MAZIE B. HALL SCHOLARSHIP. This scholarship was established in honor of Mazie B. Hall '24 who worked all of her adult life to establish better relations among individuals.

HEALTH AND PHYSICAL EDUCATION SCHOLARSHIP. This scholarship is awarded to health and physical education majors who have completed at least one full year of course work at the University. All applicants must have a GPA of 3.0 or higher. Final selection will be based on scholarship, need, campus contribution, citizenship, character, and ability in specific areas of the major field. Applications are available through the Department of Health and Physical Education Scholarship Committee.

MARION PETERS IRVIN ENDOWED SCHOLARSHIP. This scholarship was established by family members to assist an upperclass education major, committed to teaching, who has financial need.

ANN JOHNS SCHOLARSHIP. This scholarship is awarded by the Faculty Dames of West Chester University to undergraduate women who are at least 25 years old and enrolled in degree programs. Contact the Office of Financial Aid for additional information and application forms.

SAUL JACOBS SCHOLARSHIP. This scholarship was established by Mrs. Lillian Jacobs and Mr. Albert Jacobs in memory of Saul Jacobs, a member of the class of 1933. The award is given to a student with talent in both creative writing and tennis. The award is made by the University Scholarship Committee based on recommendations from the director of athletics and the director of the Creative Writing Program.

ARTHUR E. JONES MEMORIAL SCHOLARSHIP. Talent in the choral conducting area is the consideration for this annual award to a music student in remembrance of Dr. Arthur E. Jones, former chair of choral music. To be eligible, a student must be a junior who has completed a course in choral conducting. A 2.00 overall GPA and a 2.50 music GPA are required. The Department of Vocal and Choral Music selects the recipient.

WALKER HAMILTON, JR. MEMORIAL AWARD. As a memorial to Walker Hamilton, Jr., an associate professor of English who died in 1968, the Department of English annually makes an award to an academically superior English major. The recipient must have completed three years at West Chester.

MARTIN LUTHER KING JR. SCHOLARSHIP. Contact the Black Student Union for additional information and application forms.

FRITZ K. KRUEGER MEMORIAL VOICE SCHOLARSHIP. Two scholarships for freshman students who are vocalists are awarded in honor of the late Fritz K. Krueger, who taught in the Department of Vocal and Choral Music from 1961 until 1971. Applications are made to the dean of the School of Music.

STANLEY H. AND FLEURETTE LANG/NORTHEAST HIGH SCHOOL SCHOLARSHIP. This scholarship was established by the Northeast High School Alumni Association and is awarded to a Northeast High School graduate based on high scholastic standing, class rank, SAT scores, service to Northeast High School, good character, school and community citizenship, and financial need. The scholarship is renewable through four years.

MEL LORBACK ENDOWED SCHOLARSHIP FUND. Established by Jerad L. Yeagley '62, this scholarship honors Mel Lorback, former WCU soccer coach and professor. The scholarship will assist a male soccer player with outstanding academic and leadership qualities, with preference given to physical education majors.

MARTHA FORD McILVAIN '52 SCHOLARSHIP. These scholarships are awarded through the Alumni Association to students with demonstrated meritorious academic achievement. Application forms are available through the Office of Financial Aid.

LEWIS H. MARSHALL AWARD. An annual award is made to a senior in the social and behavioral sciences whose leadership, professional promise, and academic achievement are outstanding. It is made available by the Chester County Association of Township Officials, and the awardee is selected by a committee of faculty selected from appropriate disciplines.

CHARLES MAYO SCHOLARSHIP. This award of approximately $250 is made annually in memory of Dr. Charles Mayo, a political scientist, who was president of West Chester University from 1974 until 1982. It is made by vote of the political science faculty to an outstanding junior or senior in the discipline. Details are available through the Office of Political Science.

DR. ALAN P. MEWHA ENDOWED SCHOLARSHIP. Established by Dr. Pricilla Alden Mewha in memory of Dr. Alan P. Mewha and his instructors Miss Harriet Elliot and Miss Leone Broadhead, this scholarship is awarded to an outstanding upperclass geography major.

S. POWELL MIDDLETON MEMORIAL SCHOLARSHIP. This is an annual award to a freshman music student for talent and achievement on an orchestral instrument. The award honors the former conductor of the University Symphony Orchestra who died in 1970.

DOROTHY GIVEN MILLER AND FRANK WILLIAM MILLER SCHOLARSHIP. This scholarship was established by Dorothy Given Miller, class of 1919, and Frank William Miller, class of 1920. Recipients must have successfully completed one year at the University and demonstrate academic achievement, leadership, strength of character, and financial need. Application forms are available from the Office of Financial Aid.

BOARD OF GOVERNORS SCHOLARSHIPS. Merit-based scholarships available to incoming freshman minority students. Awards are based on the successful completion of an academic high school program, satisfactory SAT/ACT scores, high school rank, and academic record. The Free Application for Federal Student Aid *also must be completed.* For additional information and

application forms, contact either the Office of Admissions or the Office of Financial Aid.

LLOYD C. MITCHELL PIANO SCHOLARSHIP. This scholarship was established in honor of Dr. Lloyd C. Mitchell upon his retirement in 1971 after 35 years' service at the University, including 20 years as chair of the Department of Music and dean of the School of Music. It is awarded annually to a freshman music student selected by a piano faculty jury. Applications are made to the dean of the School of Music.

CLIFTON E. MORGAN MEMORIAL AWARD. Presented annually to a West Chester student as a memorial to a member of the Department of History, who died in 1974.

MICHAEL MOROCHOKO MEMORIAL PIANO AWARD. The Department of Keyboard Music presents a scholarship annually to an outstanding junior music student majoring in piano. This award is a memorial to Michael Morochoko, father of a former student.

SOPHOMORE MUSIC SCHOLARSHIP. Three scholarships are given annually to music education sophomores. University citizenship and musical performance as well as a 2.00 overall GPA and a 2.50 music GPA are required. Applications are made to the dean of the School of Music.

EDITH HARMON PARKER BLACK CAUCUS ALUMNI CHAPTER SCHOLARSHIP. This scholarship was established through the estate of Edith Harmon Parker '33 and is awarded to a student with good academic standing studying a discipline related to human relations, with preference given to black students.

NATIONAL GUARD OFFICERS SCHOLARSHIP PROGRAM. Upon certification by the appropriate National Guard official as being eligible, students may register for a given semester by paying 25 percent of tuition costs plus all other fees. The University will bill the National Guard directly for the remaining 75 percent of the tuition charges.

NEW JERSEY ALUMNI SCHOLARSHIP. The New Jersey Chapter of the West Chester University Alumni Association sponsors two annual $500 scholarship awards. These awards are available to students who are New Jersey residents and are funded by the contributions of New Jersey alumni. Applications may be obtained through the Office of Financial Aid and the Office of Development and Alumni Relations.

CHARLOTTE W. NEWCOMBE FOUNDATION SCHOLARSHIP. This scholarship is awarded to undergraduate women who are at least 25 years old and enrolled in their junior or senior years. Selection is based on scholastic ability, financial need, and special life circumstances. Contact the Office of Financial Aid for additional information and application forms.

OFF-CAMPUS STUDENT ASSOCIATION SCHOLARSHIP. This scholarship is awarded annually by the Off-Campus Student Association to undergraduate commuters who are involved with off-campus activities.

THEODORA PANDEL MEMORIAL PIANO SCHOLARSHIP. This award is presented through the generosity of Praxiteles Pandel, associate professor of piano.

HILLARY H. PARRY MEMORIAL SCHOLARSHIP. An annual award to a junior music student, granted for scholarship, citizenship, and achievement in vocal study. The scholarship is in remembrance of a former teacher of voice. A 2.00 overall GPA and a 2.50 music GPA are required.

PHI MU ALPHA, SINFONIA POWELL MIDDLETON AWARD. An annual award in memory of S. Powell Middleton is presented by the Rho Sigma chapter of Phi Mu Alpha Sinfonia men's music fraternity. It is based on outstanding musicianship, scholarship, and character. Applications are made to the dean of the School of Music.

DEPARTMENT OF PHYSICAL EDUCATION SCHOLARSHIP. Three scholarships are awarded to any sophomore, junior, or senior student in health and physical education. Applications are made to the chairperson, Department of Physical Education.

PRESSER SCHOLARSHIP. This is a grant of $1,000, consisting of $500 from the Theodore Presser Foundation and $500 from the School of Music, to be applied toward tuition in a student's senior year. It is awarded by the president of the University to the student majoring in music who achieved the highest cumulative GPA at the end of the junior year, having completed no less than 95 credits at West Chester University. During the recipient's senior year, the student will be known as the Presser Scholar, denoting a reward for excellence with the hope that the award will help the student not only financially, but also in his/her future career.

S. ROBERT AND JANET POLIS SCHOLARSHIP. This scholarship was established by Robert Polis, class of 1948, and Janet Polis. Awards are made at the discretion of the University Scholarship Committee.

WILLIAM PYLE PHILIPS SCHOLARSHIPS. Awarded annually to juniors and seniors who are natives of Chester County on the basis of demonstrated scholastic ability. Funds are available for approximately 20 scholarships to cover the basic fee. Application forms may be secured in the Office of Financial Aid.

PRESIDENTIAL SCHOLARSHIP. These merit-based scholarships are awarded to incoming freshman students based on the successful completion of an academic high school program, SAT or ACT scores, high school rank, and academic record. For additional information and application forms, contact the Office of Admissions.

N. RUTH REED HEALTH DEPARTMENT SCHOLARSHIP. This scholarship is sponsored by the West Chester University Department of Health. Applicants must be students at West Chester University (specifically, undergraduate health majors with sophomore academic status or better), possess a cumulative Grade Point Average of at least 3.00, and demonstrate high moral character, positive personality traits, and evidence of genuine interest and aptitude in working in the health field. For information contact the Department of Health.

ROBERT W. REESE ENDOWED SCHOLARSHIP. Established by Patricia R. Reese '66 in memory of her late husband, who served as athletic director at WCU for 19 years, this scholarship assists students with a minimum 2.0 grade point average who are involved in varsity baseball, basketball, and/or football.

WINIFRED PIERSOL REESER '43 ENDOWED SCHOLARSHIP. This scholarship supports an upperclassman who is committed to the field of health and physical education and maintains a grade point average of at least 3.0.

REISS FOREIGN STUDIES ENDOWED SCHOLARSHIP. Retired faculty member Mary Ann Reiss created this scholarship for students majoring in French, German, Russian, or Spanish who plan to study abroad.

FRANCIS J. REYNOLDS SCHOLARSHIP. This scholarship is awarded by the Department of Chemistry to a chemistry major who has successfully completed one year at the University. Applications are available through the Department of Chemistry.

ANNE M. SCHAUB MEMORIAL SCHOLARSHIP. The Anne M. Schaub Memorial Scholarship is awarded annually to a second semester sophomore women's health and physical education major student. The amount of the scholarship is $300.

SCHOOL OF MUSIC FRESHMAN STRING SCHOLARSHIP. Two scholarships are awarded to incoming freshman students who are string majors.

DAVID M. SENSENIG MEMORIAL SCHOLARSHIP. Savings bonds in the amount of $50 are given annually to two juniors with outstanding ability in mathematics. Dr. Sensenig was chair of the Department of Mathematics from 1895 to 1908. The scholarship fund is administered by the Alumni Association of West Chester University.

EVERETT E. SHAEFER MEMORIAL ENDOWED SCHOLARSHIP. Established by R. Elizabeth Wyers Shaefer '44 in memory of her husband, this scholarship assists a performing musician enrolled in any music degree program with a minimum 2.0 cumulative grade point average with a minimum 2.5 grade point average in music.

DR. AHMAD H. SHAMSEDDINE MEMORIAL AWARD. An annual award is given to an outstanding student in the field of business/economics, in memory of Dr. Ahmad H. Shamseddine, associate professor of economics, who died in 1971.

JANE ELIZABETH SHEPPARD VOCAL/CHORAL SCHOLARSHIP. This award was established in honor of Jane E. Sheppard upon her retirement in May 1987 after 34 years of service in the Department of Vocal/Choral Music. The recipient of this monetary award will be selected on the basis of outstanding participation in Vocal/ Choral activities, which must include four semesters of Chamber Choir, scholarship, and personal qualifications.

SICO FOUNDATION SCHOLARSHIPS. Scholarships, in a limited number, are provided by the SICO Company for four years of study at West Chester University at a rate of $1,000 per year ($4,000 total value). High school students qualified for college admission or high school graduates who have not attended college on a full-time basis may compete for a SICO Foundation Scholarship when their legal residences are located in the state of Delaware; in Cecil County, Maryland; or in the following Pennsylvania counties: Adams, Berks, Chester, Cumberland, Dauphin, Delaware, Lancaster, Lebanon, and York. A student attending the Shippensburg, Boyertown, Spring-Ford, or Williams Valley High Schools in Pennsylvania, or the Del-Mar High School in Delaware whose residence is outside the aforementioned area is considered in the SICO Company service area and may apply for a scholarship. No distinction is made on the basis of sex, race, or religious belief. Information may be secured from high school guidance offices in the above-referenced areas.

SIGMA ALPHA IOTA LOIS ALT AWARD. The Epsilon Epsilon Chapter of this academic music fraternity for women offers a yearly award honoring Lois W. Alt, a member of the Department of Vocal and Choral Music faculty and cofounder/adviser of the campus chapter. The award is based on University leadership, high musical standards, and financial need.

ROB SIMON MEMORIAL AWARD. This award has been established by Joseph and Janice Simon, alumni of the School of Music, and the late Dr. Irving H. Cohen, a member of the School of Music faculty for many years, in memory of Rob Simon, who was a double bass major at the University. The competition is open to double bass majors during their junior or senior year.

GREG SMITH MEMORIAL SCHOLARSHIP. An annual scholarship of $100 is presented by the baseball club in memory of a former baseball captain and president of the baseball club.

W. W. SMITH CHARITABLE TRUST. The W.W. Smith Charitable Trust was established in 1977 under the will of William Wikoff Smith, an important supporter of educational opportunity in the Delaware Valley. Established through his will, the W. W. Smith Charitable Trust has carried on Smith's work. Funds from this program are used to support students enrolled in the Academic Development Program at West Chester University. For additional information, contact the director of the Academic Development Program or the Office of Financial Aid.

CHARLES A. SPRENKLE ENDOWED SCHOLARSHIP. Created by family and friends, this scholarship honors Dr. Charles A. Sprenkle, who joined the faculty in 1955 and was appointed dean of the School of Music in 1971. The scholarship is awarded annually, at the beginning of the fall semester, for tuition assistance to the sophomore who achieved the highest grade point average during the previous year as a full-time freshman enrolled in the School of Music.

JANE B. SWAN SCHOLARSHIP. Sponsored by the Women's Institute of West Chester University, a $100 scholarship is awarded annually to a woman student who is completing an interrupted education. Application forms are available at the Women's Center and the Office of Financial Aid.

DR. CHARLES S. SWOPE SCHOLARSHIP FOUNDATION. A Memorial Scholarship Trust Foundation established by Charles E. Swope and Richard M. Swope in memory of Dr. and Mrs. Charles S. Swope. Dr. Swope served as president of West Chester University for a quarter of a century. Applicants must be full-time students enrolled in their junior year. Scholarships are $1,000 each; up to 15 may be awarded annually. Applications must be filed on or before April 1. Selection is made during May with scholarships commencing in September.

JOY VANDEVER ENDOWED SCHOLARSHIP. Established by the friends of Joy Vandever upon her retirement from the West Chester University faculty, this scholarship provides assistance to a voice student in the School of Music.

WILKINSON MUSIC THEORY SCHOLARSHIP. This scholarship is awarded to a sophomore music student during the spring semester on the basis of talent and achievement in the areas of music theory, ear-training, and sight singing. The scholarship fund has been established by Dr. Harry Wilkinson, retired professor in the Department of Music Theory and Composition.

LOIS WILLIAMS ENDOWED SCHOLARSHIP. This scholarship was established by Lois Williams, the former

choral conductor and vocal professor who retired in 1991 after 36 years of service to the University. It is awarded to a student in any music degree program within the School of Music who has earned a cumulative grade point average of at least 3.0 in all music subjects. The student must be at least in his or her third semester of Concert Choir. The candidate for this scholarship will be selected by the conductor of the Concert Choir and will be presented to a student whose leadership and responsibility as a member of the Concert Choir is an obvious indication of this person's potential as a musician/educator.

WRITING AWARD. A certificate presented annually to one junior and one senior nursing student who demonstrate "outstanding writing ability." The faculty of the department selects the recipient.

RUTH WALDMAN ZOLL SCHOLARSHIP. This fund was established through the generosity of the late Mrs. Ruth Waldman Zoll '28. These scholarships are especially for students who have significant need. One scholarship each year is reserved for a student entering the University from a high school in Berks County where Mrs. Zoll resided. Award amounts vary and application forms may be obtained from the Office of Financial Aid.

Student Affairs

The administration of West Chester University is committed to providing a comprehensive educational experience for students. To accomplish this mission, the Division of Student Affairs provides a variety of services and programs to augment the classroom experience. The goal of the division is to assist students in their intellectual, social, and psychological growth and to contribute to developing a campus community where knowledge, acceptance, and social concerns are basic values.

Offices within the Student Affairs Division include Career Development, Children's Center, Counseling and Psychological Services, Greek Life and Student Organizations, Health Services, Intercollegiate Athletics, Minority Affairs, Off-Campus and Commuter Life, Orientation and Parent Relations, P.R.I.D.E. Student Development Resource Center, Recreational Services, Residence Life and Housing, Student Standards, Sykes Union, and the Women's Center.

The administration believes that students should share the responsibility for governing their community and should have a voice in shaping the objectives of the University. Through a democratically constructed student government and committee structure, the administration, faculty, and student body seek to work together on behalf of the general welfare of the University.

Classification of Students

Students who attend West Chester University are classified for administrative purposes into two categories.

(1) RESIDENT STUDENTS
These students live in housing facilities operated by the University. Residents of North Campus residence halls are required to be on the full University meal plan. Those residents living in the South Campus apartment complex are not required to be on a meal plan; however, they may choose any meal plan option if they are interested.

(2) OFF-CAMPUS STUDENTS
This classification covers students who travel or commute to and from their legal residences, as well as students who live away from the homes of their parents or legal guardians in a dwelling that is not supervised or approved by the University.

Services

Residence Life and Housing

The Office of Residence Life and Housing is reponsible for creating and maintaining an environment in each housing facility that encourages academic, social, and emotional growth. Each facility is staffed with trained personnel who are available 24 hours a day to provide services, assistance, and a variety of information. All resident students are given and encouraged to read the residential handbook, A Guide to Residence Hall and Apartment Living, which contains valuable information on all services, policies, and responsibilities pertaining to all housing facilities. During the Sykes Union construction project, the Office of Residence Life and Housing will be located in 227/231 of Wayne Hall, 610-436-3307.

On-Campus Housing

The residence halls on the North Campus provide accommodations for approximately 3,100 resident students in double occupancy accommodations. In addition, the South Campus apartment complex houses almost 500 residents in four- or five-person, fully furnished units with each bedroom having either single or double occupancy. All students may be guaranteed housing for their full four years.

Housing Assignments. The Office of Residence Life and Housing makes the housing assignments for all students living in all housing facilities. These assignments are made without discrimination. Only individuals of the same sex will be assigned as roommates or in the same apartment unit. Each room or apartment has basic furnishings for comfortable living, and the students may make them more homelike with their own accessory additions. During orientation, students are informed about the services and equipment furnished by the University and those necessities that they must supply for themselves. Lounge and recreation areas, television, and a variety of other facilities and conveniences provide a pleasant setting for student life in each residence hall. Services are also available in a central location in the apartment complex.

Transfer Students. Transfer students are admitted both as resident students and as commuting students. Those transfer students who desire on-campus housing should indicate this at the time they apply for admission to the University.

Married Students. The University has no housing facilities for married students. Prior to registration, they will need to secure their own accommodations in the community.

Readmitted Students. Students readmitted to the University are eligible for on-campus housing unless a specific disciplinary sanction would prohibit such occupancy. Interested students should contact the Office of Residence Life and Housing for specific information about the application process.

Overnight Guests. If accommodations are available, a resident student may have an overnight guest. Prior approval and registration must be secured from the resident director. Compliance with policies and procedures regarding the visitation registration process is expected of all residents and guests.

Policy for Withdrawals. Resident students must vacate their residence hall or apartment within 24 hours of completing the withdrawal form in the Office of the Registrar.

Dining Accommodations

Plan 1
14-Variable Program: This program entitles students to any 14 of the 19 meals served Monday through Sunday and includes a flexible fund of $100.00. This convenient program is required for all students living in the North Campus residence halls and is available to South Campus apartment residents as well as off-campus and commuter students.

Plan 2
Flexible Fund Program: This program is designed for off-campus, commuter, or South Campus apartment students. Students can place a minimum of $100.00 into a flexible fund account that can be accessed by a WCU ID Card. The program can be used in the Food Court, Campus Corner, Convenience Store, or Ram's Head Deli. With this program, there is no need to carry cash to purchase meals. The flexible fund can be increased in $25.00 increments any time.

Plan 3
10-Variable Program: This plan is for off-campus, commuter, or South Campus apartment students and entitles the student to any 10 of 19 meals served Monday through Sunday. This plan includes a flex fund of $50.00.

Plan 4
5-Variable Program: This plan is for off-campus, commuter, or South Campus apartment students and entitles the student to any five of 19 meals served Monday through Sunday. This plan includes a flex fund of $50.00.

For all meal plans, any flex fund dollars not used at the end of the fall semester will be transferred to the spring semester. Any flex fund dollars remaining at the end of the spring semester will be forfeited by the student and will not be refunded. The meal week runs from Monday to Sunday; any unused meals at the end of any week will be forfeited.

Students in North Campus residence halls will have their meal plan cost included in their University billing. Off-campus, commuter, and South Campus apartment students can sign up for a meal plan by applying at the Office of the Bursar in the Elsie O. Bull Center.

Off-Campus and Commuter Life

The Office of Off-Campus and Commuter Life (OCCL) is committed to meeting the diverse needs of off-campus and commuting students. The responsibilities of the office include the Off-Campus Housing Service, advising the Off-Campus Student Association, and serving as a community resource agent for the University and local government in all areas related to off-campus and commuting students.

Additional services provided to off-campus students by OCCL include landlord/tenant legal aid information and development of long-range plans and research on the profile and needs of off-campus students.

During the Sykes Union construction project, the Office of Off-Campus and Commuter Life will be located in 221 Wayne Hall, 610-436-3305.

Off-Campus Housing

Students who choose to live in the community must secure their own living accommodations. The Office of Off-Campus and Commuter Life will assist students in finding housing by providing a variety of materials such as an up-to-date listing of available housing and an apartment complex guide. As available student rental units in the West Chester area are at a premium, it is recommended that students interested in this type of living situation begin their housing search as far in advance as possible.

Bookstore

The Student Services, Inc. Bookstore, which is temporarily located in Peoples Maintenance Building during the Sykes construction project, provides the WCU campus with textbooks, supplies, and other course material for academic programs. In addition, the bookstore offers a wide range of general reading and reference materials, computer software, WCU clothing, gifts, cards, snacks, health and beauty products, and other items.

Qualifying students may apply for an SSI Bookstore Charge in the SSI Business Office in Peoples Maintenance Building. The store also accepts Visa, MasterCard, MAC, and personal checks accompanied by a valid ID.

Store hours:

Mon.-Thurs.-Fri.	8:15 a.m.-4:15 p.m.
Tues.-Wed.	8:15 a.m.-6:00 p.m.

Extended hours are offered at the beginning of each semester, and special events also are planned. For information call 610-432-2242.

Bus Transportation on Campus

The University provides bus service from University Avenue and Church Street to South Campus (and return), Monday through Friday, during the academic year. On Saturday and Sunday there is evening bus service from 5:00 p.m. to 1:00 a.m. Bus schedules are available at information and residence hall desks.

Career Planning and Placement Services

The professional staff of the Career Development Center work directly with students throughout their years at the University assisting in defining career goals, relating academic preparation to these goals and, eventually, helping in the search for fulfilling occupations. These services are available throughout the entire calendar year in Lawrence Center, second floor. A career information library is kept current for browsing and research. Graduate school catalogs and other reference material are maintained for students considering graduate school. An interactive computer career guidance program also is available. Other activities of the Career Development Center include seminars, on-campus interviews with potential employers, resume referral, and a job posting system.

A credential service is provided for graduating seniors for an additional fee.

The Career Development Center is located in 106 Lawrence Center, 610-436-2501.

Children's Center

West Chester University students and employees can receive day-care services for their children in the on-campus Children's Center.

Children participate in educational and developmental programs while their parents are in class or at work. The center is licensed by the Commonwealth of Pennsylvania, and all required registration materials must be completed prior to a child's enrollment in the center. The center offers reduced rates to students and multiple-child discounts. The center is located in McCarthy Hall on the ground floor. For more information, including opportunities for student workers and volunteers, contact the Children's Center at 610-436-2388 or the Women's Center at 610-436-2122.

Counseling and Psychological Services Department

The Counseling Center, a part of the Counseling and Psychological Services Department, is located on the second floor of Lawrence Center. The Counseling Center provides counseling services without charge to all undergraduate and graduate students at West Chester. The faculty in the Counseling Center are licensed psychologists who are experienced in working with college students. Students may discuss their concerns, feelings, hopes, and interests freely and in *strict confidence.*

COUNSELING SERVICES: Since the Counseling Center provides services for a wide range of concerns, each student's experience will be tailored to his or her request. Students may want to clarify their vocational or educational choices, improve their interpersonal skills, or resolve personal conflicts. Their choice of approach could include one or more of the following counseling center services.

1. *Individual vocational counseling* consists of a one-to-one counseling experience that focuses on the student's choice of major and vocation. Vocational choice is most solid when it is the outgrowth of understanding one's self. Such understanding requires time and thought, and involves the student in identifying his or her own style, values, interests, and abilities. Psychological testing as well as discussion often enhances self-understanding.
2. *Individual counseling for personal problem solving* consists of a one-to-one counseling experience where the focus is on resolving personal conflicts, conflicts with others, and on improving the student's expertise at making personally meaningful choices. It may also help some people avoid decisions that restrict their personal growth and undermine their well-being.
3. *Group counseling* consists of a small group of peers with one or more counselors. Such groups meet usually once weekly to provide group members with constructive learning about themselves. Groups often have a specific focus. Past groups have focused upon:
   - Elimination of self-defeating behavior
   - Assertiveness training
   - Anxiety management
   - Test anxiety reduction
   - Eating disorders
   - Career exploration
   - Procrastination and how to avoid it
4. *Testing* can be useful in increasing self-understanding and can often assist in the process of vocational and educational decision making. The Counseling Center faculty are trained in the administration and interpretation of psychological tests, and the student and his or her counselor can decide if testing might be helpful. Arrangements also can be made at the Counseling Center for taking the Graduate Record Exam, the Graduate Management Aptitude Test, and the Miller Analogies Test — three graduate school admissions tests.
5. *Consultation Services* also are available for staff and faculty members of the University community. Counseling Center faculty can assist with crises, program planning, and group and interpersonal communications, as well as referrals to other agencies.

For more information call 610-436-2301.

Greek Life and Student Organizations

The Office of Greek Life and Student Organizations coordinates the Greek Life program at West Chester University, which includes the activities of the four Greek Governing Councils. The Greek Life and Student Organizations Office also advises West Chester's 24 national fraternities and sororities on their service projects, community activities, and rush and pledging programs. The office registers all student organizations at the University and provides leadership development programs for student leaders. During the Sykes Union construction project, the Office of Greek Life and Student Organizations will be located in 209 Wayne Hall, 610-436-2117.

Health Services

The University Health Center is staffed by a medical and health education team of physicians and nurses who are available to meet first-aid needs and to treat acute minor illnesses and surgical conditions. Gynecological services, including testing for pregnancy and sexually transmitted diseases, are available as well. Contraceptive counseling and routine examinations are available by appointment only. The University is not responsible for any additional medical or surgical services or hospitalization.

All students are required to pay a health service fee at the beginning of each semester. The fee covers office visits and certain diagnostic tests. Many medications are available at a nominal fee. Allergy injections also are given at the Health Center.

The University Health Center is located in the lower level of Ramsey Hall, 610-436-2509. Services are available to currently enrolled students only. When school is in session, the Health Center is open Monday through Friday from 8 a.m. to midnight and Saturdays from 10 a.m. to 6 p.m. during fall and spring semesters. Summer hours are provided weekdays only from 8 a.m. to 4 p.m.

Insurance Programs

Because of the unpredictable nature of medical and surgical emergencies, all students are encouraged to be covered by a health insurance program. Student insurance plans are offered through the Health Center. Information on the insurance program is mailed to students prior to registration or may be obtained from the University Health Center.

Insurance requirements may be mandated by specific departments and/or athletic programs. Refer to the appro-

priate section in the catalog for further information on these requirements.

Liability Insurance Requirement for Students in Nursing. See the section describing the Department of Nursing.

Student Physical Examinations

A physical examination is required for all entering and transfer students. The University Health Center reserves the right to request an annual physical examination by the family physician for any student suffering from a chronic illness.

No student will be permitted to register for classes until a history and physical examination report is completed and filed. These forms are available at the University Health Center and are mailed to students prior to registration.

Communicable Diseases

A current physical examination, including a report of a negative tuberculin test or chest X-ray showing no active tuberculosis (TB), is mandated by the Pennsylvania Department of Education for all senior student teachers and all junior or sophomore students participating in a field experience in the public schools. The TB test may be given free of charge at the Health Center.

All students born after 1957 must show evidence of immunization involving other communicable diseases and booster shots against measles. Guidelines published by the Center for Disease Control will be adhered to and revised as appropriate to protect the health of those in the University community.

Because of the potential for transmission of several infectious diseases, all students utilizing injectable medicines will be required to show evidence of satisfactory disposal of needles and syringes. The Health Center will provide free disposal of medical waste.

Mail Service

The University has an on-campus post office located on the second floor of Lawrence Center. Commuting students requesting a mail box must show a need for the box by applying to the Office of Off-Campus and Commuter Life, which will approve or disapprove the mail box request. During the Sykes Union construction project, the Office of Off-Campus and Commuter Life will be located in 221 Wayne Hall, 610-436-3305. Resident students receive their mail at their residence halls. To ensure prompt delivery, mail sent to North Campus resident students should show the student's name, room number, the name of the residence hall, and the University's name and address (West Chester University, West Chester, PA 19383). Mail sent to South Campus residence students should show the student's name, 839 South Campus Drive, Box #, West Chester, PA 19382 (do not include WCU in the South Campus address).

Minority Affairs

The Office of Minority Affairs is dedicated to the development of multicultural sensitivity, understanding, and appreciation of diversity among students. The office develops and implements comprehensive programs aimed at addressing the needs and concerns of the minority student. It also serves as a consultant to other University offices regarding minority students and aids in projects focused on improving the general campus climate for minorities.

Orientation and Parent Relations

The Office of Orientation and Parent Relations is responsible for the coordination of the Summer Orientation Program, and the September and January Orientation sessions for new students.

West Chester's orientation programs (specific sessions for freshman, transfer, and adult students) are designed to introduce new students to the University and acquaint them with the academic, student services, and social aspects of college life. Attendance at orientation, along with taking the orientation course (University 101) in the fall semester, is a graduation requirement.

Other responsibilities of the office include coordination of Parent Orientation programs, the Parent Handbook, and the annual Family Day program in the fall. The 1994 Family Day program will be held on October 29.

During the Sykes Union construction project, the Office of Orientation and Parent Relations will be located in 221 Wayne Hall, 610-436-3305.

P.R.I.D.E. Student Development Resource Center

Located in B-20 Killinger Hall, the PRIDE (Promoting Responsible Ideas, Decisions and Experiences) Student Development Resource Center is staffed by Student Peer Educators who are supervised by a professional staff member. The PRIDE Center has as its focus five major areas of educational programming: self-esteem and values, substance use and abuse, sex and sexuality, wellness and diversity. The center offers a variety of services to the University community, including a library of print, audio, and video information available for loan; programs and workshops; consultation for students, faculty, and staff; support/discussion groups; and referrals to treatment facilities when appropriate. For more information regarding information services, contact PRIDE at 610-436-3276.

Public Safety

West Chester University is concerned about the safety and welfare of all campus members and is committed to providing a safe and secure environment. Campus security is the responsibility of the University's Public Safety Department, located in the Peoples Maintenance Building at the corner of Church Street and University Avenue.

Because no campus is isolated from crime, the University has developed a series of policies and procedures to ensure that every possible precautionary measure is taken to protect members of the University community while they are on campus.

A full explanation of the University's security policies and procedures, as well as additional pertinent information, appears in a publication called "Your Safety Is Our Concern," which is available from the Office of Admissions and the Department of Public Safety.

Vehicle Registration

All administrators, faculty, staff, eligible students, and visitors desiring to use designated parking lots must register their vehicles with the Department of Public Safety and purchase/obtain parking decals. Resident students with less than 63 credits and commuter students with less than 25 credits (as of September of the academic year in which they wish to register a vehicle) are ineligible to park on North Campus. The annual registration fee will be set by the president upon recommendation of the Parking Committee. For purposes of this document, "annual" is defined as September 1 until August 31 of the following year. Specific registration procedures will be announced yearly.

A valid, nonsuspended operator's license and vehicle registration card(s)

must be presented at the time the vehicle is registered.

When you receive your decal, place it in your vehicle immediately. Instructions on placement are on the reverse side of the decal.

Mutilated or defaced decals must be replaced for a fee of $5.00 by contacting the Department of Public Safety.

The operation and registration of a vehicle must conform to Commonwealth vehicle law and University regulations. For complete information regarding motor vehicles and registration, refer to the Motor Vehicle Regulations available at Public Safety.

Student Services, Incorporated (SSI)

Student Services, Incorporated (SSI) is a not-for-profit organization primarily designed to serve the students of West Chester University. The objective of this corporation is to initiate, regulate, and operate the financial matters of all cocurricular student activities. Such activities include the management of the campus bookstore, student publications, student organizations, check cashing/ticket service, the administrative aspects of the student union, student programming, intercollegiate athletics, athletic foundations and clinics, and the graduate student association.

In fiscal matters and in various policy-making areas, the final authority rests with the president of the University.

The SSI Business Office, 610-436-2955, is temporarily located in Peoples Maintenance Building during the Sykes construction project.

Student Standards

In addition to providing a sound educational environment for intellectual pursuits, West Chester University is concerned with developing socially responsible citizens, ensuring the welfare and freedom of all members of the University community, and protecting individual rights. The University is thus concerned with the quality of student conduct and has adopted rules and behavioral standards for its students. These regulations are outlined in the "Student Code of Conduct" contained in the *Ram's Eye View Student Handbook*. Disciplinary action may be imposed when a student fails to recognize or violates the rights and privileges of other individuals or behaves in a manner not consistent with University policies.

The "Student Code of Conduct" reflects the University community's concern that high standards be maintained by students and student organizations. It guarantees due process and protects the individual freedom of the student as well as requiring his or her responsibility for conduct violations.

University judicial action will be taken in addition to actions taken by civil or criminal courts. Students will be subject to University judicial action in conjunction with citations or other charges of which the University becomes aware.

During the Sykes Union construction project, the Student Standards Office will be located in 216 Wayne Hall, in the Dean of Students Office, 610-436-3511.

Sykes Union Building

The Earl F. Sykes Union Building, opened in 1975 as the community center for West Chester University, offers a wide range of cultural, social, educational, and recreational programs and services. To accommodate student needs a major renovation and expansion construction project began in August 1993. This project will expand the current 62,000 square foot facility to a "new" multipurpose facility of approximately 102,000 square feet.

During the Sykes Union construction project, both Wayne Hall and Peoples Maintenance Building will be the temporary home of Sykes Union functions. The second floor of Wayne Hall houses the Student Affairs offices of the Vice President, Associate Vice President and Dean of Students, Assistant Vice President, Residence Life and Housing, Off-Campus and Commuter Life, Orientation and Parent Relations, Greek Life and Student Organizations, Student Standards, and the Student Union Management. The second floor also houses the Student Union Information Center which serves as a central information center for campus. Reservations for meeting rooms in Wayne Hall and other campus locations are coordinated through the Information Center. The third floor of Wayne houses the departments of Student Programming and Student Activities along with approximately 20 student clubs and organizations, including the WCUR radio station, the QUAD newspaper, and the Student Government Association.

The Bookstore, Ram's Head Deli, and Student Services, Inc. Business Office have all been relocated to Peoples Maintenance Building during the Sykes construction project. The Ram's Head Deli (Annex) is used for food service seating, and as a place to study, relax, and play video games. The Ram's Head Annex also houses the "Innovations" nonalcoholic nightclub and "Club Tuesday" events. For information regarding Sykes Union functions, Wayne Hall offices, and Peoples Maintenance Building operations, call the Student Union Information Center at 610-436-3360 or 436-2984.

Women's Center

The Women's Center addresses the special concerns of all women, including the issues facing women students who enter West Chester University from high school or return to college after time at home or in the job world. Located in Lawrence Center on the second floor, the Women's Center provides a lounge area for conversation, as well as study, peer advising, and support and special interest programs (lectures, films, concerts, etc.). For more information, including opportunities for student volunteers, call 610-436-2122.

Activities

Student Activities on Campus

Student activities at West Chester University encompass a wide range of cultural, social, educational, and recreational programs for a diverse student population.

The departments of Student Activities and Student Programming, under the auspices of Student Services, Inc., take a leadership role in organizing and sponsoring joint or individual projects as part of its mission. One major role centers on advisory relationships with the Student Activities Council (the major programming organization on campus), Innovations (a unique and nationally recognized nonalcoholic nightclub that presents campus comedians, DJ music, and "Top 40" bands on Thursday nights), and the University Contemporary Issues Committee (a group that concentrates on issues-oriented programming). Current movies, area band performances, national cul-

tural entertainment acts, lectures (with a special emphasis on the "Leadership, Unity, and Volunteerism and Image Maker" programs), variety lunchtime entertainment, and special events such as Welcome Week are all sponsored by Student Programming and the Student Activities Council. Homecoming, Family Day, Spring Weekend, and major concerts are additional special University events that unite many segments of the campus. During the Sykes Union construction project, the Student Programming and Student Activities Departments are located in 302/307 Wayne Hall, 610-436-2983 or 436-3037.

Students can become a vital force on campus through participation and involvement in student organizations and activities. All students have an opportunity to attend campus events and/or join an organization that meets their individual needs. Leadership roles always are available, so being active can become one of the more enriching experiences in student life. Becoming involved builds individual integrity and a sense of community—two desirable qualities in all aspects of life. Student activities and organizations are the lifeblood of any campus environment, and West Chester University has many such opportunities.

Student Organizations

Each November, an updated "Student Organizations Directory" is printed that includes the names, addresses, and telephone numbers of all presidents and advisers of more than 180 campus student organizations. For more information on WCU student organizations, contact the Office for Student Development, 209 Wayne Hall, 610-436-2117. The following is the official list of all student organizations that were registered during the 1993-94 academic year:

Student Governing/Campus Programming Organizations

Freshman Class
Sophomore Class
Junior Class
Senior Class
Graduate Student Association
Innovations
Off-Campus Student Association
Residence Hall Association
Student Activities Council
Student Government Association
Sykes Union Board of Governors

Academic/Professional Organizations

Accounting Society
Alchemist Club
Anderson Math Club
Anthropology Club of WCU
Art Association
Association for Childhood Education International
Association for Educating Children in Mathematics
Athletic Training Club
Communications Club
Computer Club
Criminal Justice Association–Sigma Tau Omicron
Dance Production Workshop
Darlington Biological Society
Economics and Finance Society
Forensic Society
French Club
Geography Club
German Club
History Club
Honors Student Association
Institute of Management Accountants
Italian Club
Law Society
Linguistics Club
Marketing Society
Metamorphose
National Student Speech, Hearing and Language Association
Philosophy Club
Political Science Club
Psychology Club
Social Work Club
Society for the Advancement of Management
Society of Physics Students
Sociology Club–Delta Alpha Tau
Spanish Club
Special Education Club
Student Pennsylvania State Education Association (PSEA), National Education Association (NEA)
Student Nurses' Association of Pennsylvania (SNAP)
United States Institute of Theatre Technology
West Chester Association for the Education of Young Children
WCU Theatre

Special Interest Organizations

Black Student Union
Chess Club
Disabled Student Union
EARTH (Environmental Association for Repairing the Habitat)
El Milagro (Latino Student Union)
Health Club
International Student Association
Lesbian, Gay, Bisexual Association
National Student Exchange Organization
Photography Club
Pro-Choice
Recreational Services
Semper Fidelis
Students for Life
Together Toward Peace
University Contemporary Issues Committee
Women's Center Club

Religious Organizations

Baptist Student Ministry
Campus Crusade for Christ
Christians in Action
Collegiate Christian Fellowship
Gospel Choir
Hillel Jewish Student Union
Inter-Varsity Christian Fellowship
Latter Day Saints Student Association
Lutheran Student Association
Muslim Student Association
Newman Student Association
United Campus Ministry
Westminster College Fellowship

Service Organizations

The Abbé Society
Alpha Phi Omega
Emergency Medical Services
Friars Society
Habitat for Humanity
Phi Sigma Pi
University Ambassadors

Greek Letter Organizations Governing Councils

Black Greek Council
Interfraternity Council
Inter-Greek Council
Order of Omega
Panhellenic Council

Fraternities

Alpha Chi Rho
Alpha Phi Alpha
Iota Phi Theta
Kappa Alpha Psi
Kappa Delta Rho
Lambda Theta Phi
Omega Psi Phi
Phi Beta Sigma
Phi Delta Theta
Phi Kappa Sigma
Pi Kappa Phi
Sigma Pi
Sigma Phi Epsilon
Theta Chi
Zeta Beta Tau

Sororities

Alpha Kappa Alpha
Alpha Phi
Alpha Sigma Tau
Alpha Xi Delta

Delta Phi Epsilon
Delta Zeta
Phi Sigma Sigma
Sigma Gamma Rho
Zeta Phi Beta
Zeta Tau Alpha

Publications and Media Organizations

Daedalus
The Quad
The Serpentine
WCUR–West Chester University Radio
WCTV–West Chester Television

Sports Clubs

Equestrian
Fencing
Ice Hockey
Karate
Rugby–Men
Rugby–Women
Skiing
Sports Club Council
Volleyball–Men
Water Polo

Musical Organizations

Brass Ensemble
Chamber Choir
Close Harmony
Collegium Musicum
Concert Band
Concert Choir
Criterions Jazz Ensemble
Field of View
Flute Ensemble
Guitar Ensemble
Kappa Kappa Psi
Marching Band–"Golden Rams"
Masterworks Chorus
Music Educator's National Conference—Chapter 21 (PCMEA)
Opera Theatre Ensemble
Percussion Ensemble
Phi Mu Alpha Sinfonia
Saxophone Ensemble
Sigma Alpha Iota
Symphonic Band
Symphony Orchestra
Tau Beta Sigma
University Chorale
Wind Ensemble
Women's Choir

Honor Societies

Childhood Studies and Reading–Alpha Upsilon Alpha
Communication Studies–Pi Kappa Delta
Economics–Alpha Epsilon
Education–Delta Kappa Gamma
Education–Kappa Delta Pi
Education–Phi Delta Kappa
Educational Services–Chi Alpha Epsilon
English–Sigma Tau Delta
Foreign Languages–Alpha Mu Gamma
Geography–Gamma Theta Upsilon
Geology–Sigma Gamma Epsilon
Health Science–Eta Sigma Gamma
History–Phi Alpha Theta
Mathematical Sciences–Pi Mu Epsilon
Music–Pi Kappa Lambda
Nursing–Sigma Theta Tau
Philosophy–Phi Sigma Tau
Physical Education–Phi Epsilon Kappa
Physics–Sigma Pi Sigma
Political Science–Pi Sigma Alpha
Psychology–Psi Chi
Social Science–Pi Gamma Mu
Social Work–Phi Alpha
Sociology–Alpha Kappa Delta
Theater Arts–Alpha Psi Omega

The following section provides a sampling of information about some of the student groups on campus. For a comprehensive listing of descriptions, refer to the *Ram's Eye View Student Handbook*.

Student Governing/Campus Programming Organizations

The Student Government Association (SGA) is the legislative body that represents the students at West Chester University. Under guidance from the vice president for student affairs, SGA represents student opinions concerning policies and procedures, deals with issues on campus that have a direct effect on students, and gives students experience in the processes of government. All students are automatically members of SGA upon paying the activity fee that is included in the tuition bill.

The purpose of the Residence Hall Association (RHA) is to provide for the social, cultural, and educational life of resident students. RHA purchases and maintains recreational equipment, provides social events, and aids the residence life staff in educational programming, living conditions, and regulations in the residence halls. Its varied activities stem from representation and participation in the residence halls. Each hall has a representative from every floor and a slate of officers. The officers from every residence hall represent their respective halls in the Residence Hall Association General Assembly. The hall presidents sit on the RHA Board of Presidents, the decision-making body of the organization. The board then appoints an executive director to act as official spokesperson for the organization.

The Off-Campus Student Association (OCSA) is a student organization whose primary goal is the representation of all students living off campus. OCSA objectives include distributing University information, designing educational and social programming, and developing positive community relations. Through representation and input to various University committees, OCSA represents the ideas and concerns of all students living in the West Chester community as well as students who commute to the University.

The Student Activities Council (SAC) is one of the main student programming organizations at West Chester University. Totally funded and run by students, SAC creates and programs many of the activities and events on campus, such as major movies, concerts, comedy events, and low-key, "coffeehouse" entertainment. By using students' talents and energies, SAC strives to present a wide variety of programs that meet the needs and interests of the West Chester University Community. SAC is comprised of six committees and an Executive Board. Membership is open to all WCU students at any time.

Academic/Professional and Special Interest Organizations

Communications Club. The Communications Club provides opportunities for students to learn about communication as an area of study, research, and application in an informal manner. Social functions, guest speakers, field trips and conferences are provided in conjunction with the Department of Communication Studies.

Forensics. The University has a strong program in intramural and intercollegiate forensics. Its Forensic Society is the focal point for training in competition in debate, oratory, extemporaneous speaking, after-dinner speaking, discussion, interpretive reading, and other events.

University Theatre. Excellent opportunities for experience in theatre are offered through this student organization that functions in the Studio Theatre and the Playhouse. Its major productions, drawn from the classics and from contemporary drama, are outstanding events for the University and the community as well. All students with an interest in drama are welcome.

United States Institute of Theatre Technology. USITT is a national organization which, through publications, conferences, and networking, helps production and design professionals keep in touch with today's rapidly changing scene.

Student Nurses Association of Pennsylvania (SNAP). One goal of the Department of Nursing is to encourage a commitment to professional nursing. The SNAP organization helps build professional nursing interests and aids in the development of the whole person through various interdisciplinary educational programs and services. SNAP is a constituent member of the National Student Nurses' Association.

The Black Student Union, which was formed in 1971, is dedicated to the creation of a culturally meaningful atmosphere for black students at West Chester. Black Student Union membership is open to all West Chester students, faculty, and staff—regardless of race, color, or creed—who have a concern for the economic, political, and social concerns of blacks.

A major purpose of the organization is to broaden and enhance the academic and social lives of black students at the University. The union's democratically structured constitution provides for an executive board elected by the membership. Membership in the B.S.U. is inclusive of all students who are interested, both graduate and undergraduate. Attendance at B.S.U. functions are generally open to both student and nonstudent publics.

Religious Organizations

In addition to the religious student organizations previously listed, the West Chester Community has a large number of churches and synagogues representing many religious denominations. Students are always welcome at those places of worship.

A complete listing of student religious and local community organizations can be found in the "Religious Life Directory," which is published by the Religious Life Council and the Division of Student Affairs. The Religious Life Council also coordinates religious programs and activities on campus. For more information contact the Office for Student Development.

Service Organizations

Alpha Phi Omega. The Omicron Upsilon chapter of this fraternity, which is dedicated to service and leadership development, is open to all men of the campus community. The Omicron Upsilon chapter conducts many service-oriented activities.

The Friars Society. The Friars Society, which has been established at West Chester for many years, is composed of sophomore, junior, and senior men invited into the organization in recognition of character and leadership. The society's various service projects are designed to contribute to the good of the University community.

The Abbé Society. The Abbé Society is an honorary service society composed of sophomore, junior, and senior women. The Abbé Society is dedicated to upholding the qualities of friendship, leadership, and character through service to the campus and community.

University Ambassadors. The University Ambassadors are a select group of student leaders, coordinated by the Office of Admissions. They promote West Chester University among past, present, and future students by providing weekly campus tours and representing the University at special events such as the Open Houses, hosted by the Office of Admissions. In concert with the offices of Alumni Relations and Development, the University Ambassadors assist in showcasing the University at alumni events such as Homecoming, Alumni Day, and class reunions. They serve as liaisons between the campus and community.

The West Chester University Emergency Medical Services (EMS) is a volunteer-run organization of student health professionals who enjoy helping people. A quick-response unit is maintained to provide emergency medical care to the campus community, providing temporary emergency care 24 hours a day during the academic year. The EMS also plays an active role in the education of the campus community in first aid and cardiopulmonary resuscitation (CPR) techniques. Necessary training is provided to members.

Greek Letter Organizations

The University has a system of 14 national fraternities and 10 national sororities, which are listed under Student Organizations. The system is governed by the Black Greek Council, the Interfraternity Council, the Inter-Greek Council, and the Panhellenic Council. Since their introduction in 1969, the social fraternities and sororities have become an integral part of campus life.

Publications and Media Organizations

The Quad. The student newspaper of West Chester University is published weekly by a student staff with a faculty member as adviser. In addition to its primary role in disseminating news of campus events, *The Quad* also provides students with practical experience in reporting, editing, and photography, as well as in advertising and the business side of newspaper publishing. Students interested in working for *The Quad* should contact the editor at the newspaper office, 610-436-2375.

The Serpentine. The yearbook provides a pictorial and written record of the year's activities at the University. It is edited by a student staff with a faculty adviser. Positions on the yearbook staff are always available for incoming and current students. The training and experience gained in photography, writing, layout, and administration is useful in the publishing industry and many other careers.

Station WCUR. The campus radio station at West Chester University offers experience in all phases of radio broadcasting, from on-air activities, to production, to business and advertising. Operated entirely by students, WCUR offers practical work opportunities in a learning atmosphere. In addition to providing student members with experience, WCUR offers the University community a broad range of music styles, including progressive rock, jazz, new age, reggae, and others, as well as the latest in news from across the campus and the country.

Musical Organizations

In conjunction with the regularly scheduled student and faculty recitals, the University maintains the following well-developed musical organizations that contribute to the wealth of fine music on the campus.

Three University Bands. Membership in the Symphonic Band, Concert Band, and Marching Band is determined by

the student's qualifications, regardless of curriculum.

Collegium Musicum. A chamber ensemble specializing in the use of authentic period instruments and performance techniques in the music of the Medieval, Renaissance, and Baroque eras. Open by audition.

Wind Ensemble. A band of 50 to 60 outstanding campus wind instrumentalists and percussionists, the ensemble performs challenging music, with an emphasis on contemporary works.

Symphony Orchestra. Membership is determined by the student's qualifications.

Instrumental Ensembles and Chamber Music Groups. Membership in these groups is determined by the student's qualifications.

The Criterions Jazz Ensemble. Members of the University jazz band are selected by audition.

Concert Choir. This mixed choir of approximately 40 music students, selected by audition, meets twice a week, devoting its efforts to acquiring a fine technique of choral singing through the preparation of an extensive repertoire for performance.

Chamber Choir. Members of this choir, which performs music of the Renaissance and Baroque periods, are selected by audition.

Masterworks Chorus. A mixed chorus of music students. Open to other members of the University community by audition.

Opera Theatre Ensemble. The chorus is formed through an elective course devoted to the training of a choral group that participates in opera and operetta productions. Membership is by audition.

Phi Mu Alpha Sinfonia. The Rho Sigma chapter of the professional men's music fraternity was formed at West Chester in 1967. The organization seeks to advance the cause of music in America and to foster the welfare and brotherhood of students of music. Upon approval by the brotherhood, prospective members are invited to pledge the fraternity. Prospective members must be at least second semester freshmen.

Sigma Alpha Iota. The Epsilon Epsilon chapter of this internationally incorporated, professional fraternity for women in music was formed in 1968. The fraternity is dedicated to service in the field of music. Membership, by invitation, recognizes scholarship and musicianship. Members must be in at least their second semester.

University Chorale. A mixed chorus presenting a wide selection of choral music. The chorale presents high-school level music as well as more advanced literature. Open to students in other curricula through audition.

Kappa Kappa Psi. The band fraternity, Kappa Kappa Psi, was formed in the fall of 1980 to support the band program. KKY concentrates on serving the band and School of Music through fund raising and service projects. Any member of the marching band or visual ensemble can pledge KKY. Information is posted in Swope Hall, the music building, at the beginning of the fall semester.

Tau Beta Sigma. The band sorority, Tau Beta Sigma, was formed in fall 1980 to support the band program. TBS concentrates on serving the band and School of Music by means of fund raising and service projects. Any member of the marching band or visual ensemble can pledge TBS. Information is posted in Swope Hall, the music building, at the beginning of the fall semester.

Honor Societies

Alpha Epsilon. This society is the West Chester chapter of Omicron Delta Epsilon, an international economics honor society, which recognizes high scholastic achievement in the field of economics. Students must achieve a 3.00 average and have had 12 semester hours of economics with a B average to maintain membership in the organization.

Alpha Kappa Delta. This international honor society is dedicated to promoting interest in the study of sociology and sociological research that will lead to the improvement of the human condition. It is open to sociology majors and minors who have completed four sociology courses and have earned at least 64 semester hours of credit with a minimum Grade Point Average of 3.00.

Alpha Mu Gamma. The Department of Foreign Languages sponsors a chapter of this national collegiate foreign language honor society, devoted to promoting the study of foreign languages and encouraging cultural exchange with foreign students.

Alpha Psi Omega. This honorary fraternity recognizes excellence in and dedication to the theatre arts. The organization is sponsored by the Department of Theatre Arts, and membership is open to all students regardless of major.

Alpha Upsilon Alpha. This international, specialty honor society represents the field of reading and language arts. Its purpose is to recognize scholarship, leadership, and service in the field of reading with emphasis at the undergraduate and graduate levels. A Grade Point Average of 3.50 is required.

Chi Alpha Epsilon. The Department of Educational Services sponsors this honor society, founded at West Chester University for students admitted to the Academic Development Program. Its primary purpose is to recognize academic excellence, promote unity, and foster continued scholarly accomplishments.

Delta Kappa Gamma. Delta Kappa Gamma is an international honor society for women in education. The purpose of the group is to support women and to provide scholarships for women at the undergraduate levels. International scholarships and research grants are available to women at the graduate level. Members include graduate students, faculty, alumni, and educators from local schools.

Eta Sigma Gamma. The Department of Health sponsors the Beta Xi chapter of this national professional honorary society in health science. Its purpose is to elevate the standards, ideals, competence, and ethics of professionally trained men and women in public health, school health, and environmental health. Juniors and seniors in these disciplines who have demonstrated high academic achievement are eligible for membership.

Gamma Theta Upsilon. The Gamma Eta chapter of this international, professional geographical honorary society was established in 1963. The organization promotes professional interest in geography and provides services in cooperation with the Department of Government and Planning.

Kappa Delta Pi. Kappa Delta Pi is a national honorary society for junior and senior students in education who excel in scholarship, maintain high personal standards, and are dedicated to the teaching profession.

Sigma Theta Tau. The Department of Nursing Honor Society was chartered in 1985. In November 1993 Sigma Theta Tau, the International Nursing Honor Society approved the West Chester

University Department of Nursing petition for a Sigma Theta Tau chapter. The Xi Delta chapter of Sigma Theta Tau was chartered in April 1994. The purposes of this International Nursing Honor Society are to recognize superior achievement; acknowledge the development of leadership qualities; foster high professional standards; encourage creative work; and strengthen commitment to the ideas and purposes of the profession.

Phi Alpha. The National Social Work Honor Society is dedicated to high standards of training, excellence of scholarship, and distinction of achievement in social work. West Chester's Chi Gamma chapter is committed to the promotion of humanitarian goals and ideals by a professional group for which specialized preparation is deemed imperative. Membership is open to those who have completed 12 or more semester hours in social work with a minimum overall average of 3.0 and a minimum of 3.5 in social work classes.

Phi Alpha Theta. Organized in 1968, the Nu Sigma chapter of this international honor society in history is sponsored by the Department of History. Phi Alpha Theta is open to all who have completed 12 or more semester hours in history with a minimum average of 3.01 and have maintained at least a 3.00 in two-thirds of their other course work.

Phi Delta Kappa. This is an international honor society in graduate education for men and women who are actively engaged in the profession of education. Its aim is to promote high quality education on all levels, particularly in publicly supported education. Results of research are reported in its extensive publications. The West Chester University campus chapter includes more than 100 members from the surrounding area and from the campus.

Phi Epsilon Kappa. The Department of Physical Education sponsors the Gamma Alpha chapter of this national, professional honor fraternity for students majoring in health and/or physical education. Phi Epsilon Kappa seeks to advance the profession of health and physical education.

Phi Sigma Tau. The Department of Philosophy sponsors the Pennsylvania Rho chapter of this national honor society, which recognizes academic excellence in philosophy and in general studies. Membership is open to all students, regardless of major.

Pi Gamma Mu. This honor society recognizes scholarship in the social sciences and encourages social service. Majors in the social sciences who have demonstrated high academic achievement may become candidates for membership in the Omega chapter during their junior or senior years.

Pi Kappa Delta. A chapter of this national honor society for students in competitive forensic activities was established in 1969. Pi Kappa Delta is an outgrowth of the Forensic Society.

Pi Kappa Lambda. The primary objectives of this national music honor society are the recognition and encouragement of a high level of musical achievement and academic scholarship. Nominations and elections to membership are the responsibility of the faculty committee of the chapter. The Delta Sigma chapter at West Chester University was established in 1978.

Pi Mu Epsilon. This national mathematics society is open to junior students who rank in the upper-third of their class and have completed 18 hours of mathematics with a minimum average of 3.00. It is also open to sophomores who rank in the top quarter of their class and have completed three semesters of the calculus sequence with an average of 4.00.

Pi Sigma Alpha. Organized in 1983, the Xi Gamma chapter of Pi Sigma Alpha, the national political science honor society, receives into membership students of government, political science, public administration, and international relations, irrespective of their membership in other honor societies or organizations, when such students attain high standards of scholarship and academic distinction both in political science and in the sum total of their academic work.

Psi Chi. A chapter of this national honor society in psychology is sponsored by the Department of Psychology. Membership is by invitation, with scholarship as the major criterion. Psi Chi, under the aegis of the American Psychological Association, endeavors to advance the science of psychology and encourages superior scholarship in all academic fields, particularly in psychology.

Sigma Gamma Epsilon. The Department of Geology and Astronomy sponsors the Zeta Beta chapter of this national honor society. The society was established to recognize scholarship and professionalism in the earth sciences. The Zeta Beta chapter has as its objectives the scholastic advancement of its members and the extension of service to the University and local communities. Membership is open to any student who has completed at least 12 semester hours in earth science courses and has maintained a minimum 3.00 GPA in all earth science courses and an overall GPA of 2.67.

Sigma Pi Sigma. The nationally recognized professional honor society for physics was founded in 1921 at Davidson College and presently has over 270 chapters. The local chapter, established in 1986, is an affiliate society of The American Association for the Advancement of Science and the American Institute of Physics and is a member of the Association of College Honor Societies.

Sigma Tau Delta. Under the sponsorship of the Department of English, a chapter of Sigma Tau Delta, a national honor society for students of English, was established at West Chester University in 1977. The major purpose of this organization is to stimulate interest in all phases of the study of English language and literature.

Recreational Services

The Office of Recreational Services provides leisure-time activities for the University community. Recognizing that the needs of individuals differ, Recreational Services provides activities in six program areas.

The **Intramural Sports** component affords students, faculty, and staff the opportunity to participate in individual or team competitive activities. The **Intramural Sports** program promotes health, wellness, and physical fitness, as well as encourages the worthy use of leisure time. Regardless of ability level, every individual can experience successful participation in a variety of individual or team athletic events.

For students who enjoy organized sports other than varsity athletics, the office provides the **Sports Club** component. This program is provided for students who are either skilled athletically or merely interested in participating in a club sport for sheer enjoyment of the activity. Becoming a member of a club provides opportunities for instruction, coaching, socialization, competition, and fun. Physical education majors

receive a sports credit through participation in a club program. Currently, West Chester University provides nine Sports Clubs: equestrian, fencing, ice hockey, karate, men's rugby, women's rubgy, skiing, men's volleyball, and water polo.

Outdoor recreational opportunities are conducted through the **Outdoor Resource Center** (ORC). The ORC provides a variety of different trips and one-day activities for students throughout the year. We provide the following trips and activities: canoeing, rafting, skiing, camping, and spelunking trips; ice skating nights; hiking; and horseback riding. In addition to scheduling trips, the **Outdoor Resource Center** rents outdoor recreation equipment to students, faculty, and staff for their own use or activities. The following equipment is available for rental: canoes, backpacking equipment, tents, sleeping bags, camping equipment, cross-country skis, and bicycles.

For students who do not wish to participate in a formal recreational program, we provide the **Open Recreation** component. This component provides days, times, and facilities in which students may participate in an informal recreational activity. The semester calendar lists scheduled days and times for utilizing the following: swimming pools, weight rooms, indoor track, outdoor tennis courts, and basketball gymnasium.

The **Aerobics** program is one of our most popular and successful activities. Over 800 students, faculty, and staff participate in 21 different aerobic sessions. We provide toning sessions, low and high impact sessions, and step sessions. We require that all participants register for this program. Dates and times are listed on the semester calendar.

For more information on any component provided by the Office of Recreational Services, call 610-436-2131 or 436-3088, or stop by Ehinger Gymnasium, room 133.

Intercollegiate Athletic Program

Athletic activities are an important part of the University experience — indeed, a facet of education. The underlying purpose of West Chester's athletic program is the development of enduring educational values. To achieve this, the athletic programs provide a broad variety of team and individual sports for women and men students.

The women's intercollegiate athletic programs include basketball, cross-country, field hockey, gymnastics, indoor track, lacrosse, soccer, softball, swimming and diving, tennis, track and field, and volleyball. The men's intercollegiate athletic programs include baseball, basketball, cross-country, football, golf, indoor track, lacrosse, soccer, swimming and diving, tennis, and track and field.

West Chester University is a member of the National Collegiate Athletic Association, Eastern College Athletic Conference, Pennsylvania State Athletic Conference, and the Philadelphia Association for Intercollegiate Athletics for Women.

West Chester's Health and Physical Education Center and field complex, Hollinger Field House, and Farrell Stadium afford excellent facilities and equipment for the University's broad and varied athletic programs.

Alumni Association

The West Chester University Alumni Association is an organization of more than 58,000 graduates of the University.

The purpose of the Alumni Association is to promote the interests of West Chester University in all areas of academic, cultural, and social needs, to strengthen the Alumni Association through a strong network of graduates, and to increase the awareness of alumni to the University's needs.

The Alumni Association sponsors two major events on campus each year— Homecoming in the fall and Alumni Weekend in the spring. *The West Chester University Magazine*, published quarterly, incorporates RAMPARTS, providing all alumni with information on their classmates and events of interest.

Academic Affairs

West Chester University's undergraduate programs include teaching certification programs, local certificate programs, and programs of study leading to the Associate of Arts, Associate of Science, Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science in Education, Bachelor of Science, and Bachelor of Science in Nursing. A complete list of undergraduate degree programs appears on page 52. Programs of study at the graduate level are also available. These are listed on pages 34–35 and are described in detail in the Graduate Catalog.

Honors Program

The University provides to able students with outstanding achievements in scholarship, community service, the arts, and/or leadership the opportunity to participate in a challenging Honors Program and to receive appropriate recognition when they complete the requirements. The program comprises two tiers: Honors in General Education and Junior-Senior Honors.

A certificate for **Honors in General Education** is awarded to a student who completes five of the seven lower-tier courses. These five courses are part of a core curriculum. These honors courses, generally, partially fulfill general education courses required by the University. They also fulfill writing emphasis requirements; they are not additional requirements.

Four of these courses will be offered in the freshman year, and three in the sophomore year. Honors in General Education will be given for these courses with some substitutions also accepted.

A certificate in **Junior-Senior Honors** is awarded to a student who completes only the upper tier of the program; a student who has completed both tiers is granted a certificate in University Honors. Requirements for the upper tier consist of two of the interdisciplinary seminars offered by the program itself and a senior project, which is usually done in the student's major field of study. The seminars are usually new each semester; recent topics have included "Future Energy Alternatives," "The Arts from 1900 to 1920," "Death and Dying," "Gender, War, and Peace," and "Elizabethan England." Senior

projects have been of many types, including library research theses, computer programs, recitals, and portfolios in the arts. Individual initiative is encouraged.

The program provides optional housing in an honors dormitory. Many honors students, however, live in other campus dormitories, in town, or at home.

An Honors Council, which includes both faculty and students, sets the policies of the program. A committee of that council, working with the director, determines the admission and retention of students. Further information about the Honors Program—requirements, offerings, housing, and the extracurricular activities of the Honors Student Association—is available from Dr. Elizabeth Larsen, Director, Honors Program, Room 131, Francis Harvey Green Library, West Chester University, West Chester, PA, 610-436-2996.

International Education

Established in 1986, the Center for International Programs is responsible for coordinating study abroad programs, international faculty exchanges, visitations by foreign scholars, and international programs for the campus and the broader community. In addition, the Center for International Programs actively promotes the development of an international curriculum, facilitates internships and independent study abroad, and provides a variety of essential services for the more than 300 international students from over 50 different nations.

West Chester University currently operates its own study abroad programs in the United Kingdom and France. At the University of Wales in Swansea and at the University of Paul Valèry in Montpellier, France, students are encouraged to participate in University-sponsored junior year abroad programs. The University also expects to expand study abroad opportunities in the next several years.

As expected, the Department of Foreign Languages contributes to the development of study abroad programs and the internationalization of the campus. The department, through its highly acclaimed Critical Language Program, regularly offers courses in Greek, Finnish, Chinese, Japanese, Arabic, and several other languages, in addition to its regularly scheduled series of courses in German, French, Spanish, Italian, and Russian.

Special summer study abroad opportunities are coordinated through the Center for International Programs. These have included classes in the People's Republic of China. The University's Institute for British Studies currently offers summer courses at Oxford University, England, and the School of Music regularly offers a summer program in Salzburg, Austria. In addition, the University sponsors a series of travel-study programs to numerous overseas locations, including the Galapagos Islands, Egypt, Soviet Union, China, Kenya, Australia, Nepal, and Morocco. These programs, which generally run from two to three weeks, are available to students as well as the community. Travel-study programs are generally offered in the summer or in January, during the semester break.

International travel and study opportunities for American and international students and for the community are expected to expand rapidly over the next several years. Anyone interested in taking advantage of study abroad and travel opportunities is encouraged to contact the Center for International Programs, 102 Old Library, for details on current program options, 610-436-3529.

National Student Exchange Program

West Chester is one of approximately 110 American colleges and universities, located in such states as Hawaii, California, Alaska, and Florida, which participates in the National Student Exchange (NSE) Program. The project gives students an opportunity to widen their cultural and academic horizons through a semester or a year of study in another part of the United States without paying out-of-state tuition fees or incurring such complications as credit transfers. The exchange usually takes place during the sophomore or junior years so that returning students may share their experiences with students on the West Chester campus. In order to qualify for the program, applicants must be full-time students with a 2.50 Grade Point Average. The annual recruitment program takes place during the fall semester and the first part of the spring semester, with placement for the following school year occurring midway through the spring semester. NSE information is available at the Office of the Registrar, E.O. Bull Center, 610-436-3085.

Pennsylvania State System Visiting Student Program

Undergraduate students enrolled in a degree program who have earned 27 credits and are in good academic standing have the opportunity to enroll as a visitor for a fall, spring, or summer term at any of the other 13 Pennsylvania State System of Higher Education (SSHE) institutions. The program allows students to take advantage of SPECIALIZED courses, programs, or experiences NOT AVAILABLE at the home institution without losing (home) institutional residency. Advance approval from both the home and the host institutions is required. Visiting Student Program information is available at the Office of the Registrar, E. O. Bull Center, 610-436-3541.

Environmental Programs

Students interested in pursuing environmental degree programs may choose from those identified below. Consult the departments listed for details on these programs.

Ecology. Offered by the Department of Biology, this program provides a strong background in field biology and prepares students for careers as biologists in environmental agencies, industry, consulting firms, and similar organizations.

Environmental Health Science. Offered by the Department of Health, this program synthesizes a rigorous scientific preparation with specialized, applied environmental courses on such topics as water and air pollution, hazardous wastes, and industrial hygiene and safety. It prepares students for careers as environmental scientists in government and industry.

Other nondegree options exist for students interested in environmental issues. Education majors may elect to earn a certificate in environmental education (see Department of Counselor, Secondary, and Professional Education), and geography majors may emphasize environmental planning as part of the B.A. in geography (see Department of Geography and Planning). In addition, a wide range of course work for majors and nonmajors alike is offered by the following departments: Biology; Chemistry; Counselor, Secondary, and Professional Education; Economics; Geography and Planning; Geology and Astronomy; Health; and Physics.

Pre-Professional Study and Advising

West Chester University recognizes that some students will select career goals that will require pursuit of academic degrees after the baccalaureate, either in graduate school or at a professional school. Students with such goals are encouraged to discuss them with appropriate members of the faculty.

Pre-Medical. Students interested in graduate studies in one of the health professions (dentistry, medicine, optometry, or veterinary medicine) are encouraged to apply for admission to the pre-medical program, which is supervised by members of the Pre-Medical Committee. More information about this program can be found under the pre-medical program listing in the section, "Programs of Study and Course Offerings."

Pre-Law. Students who are contemplating going on to law school should take part in the pre-law program conducted by the University. Law schools maintain that, while there is no proper "pre-law major," students should choose courses that sharpen their analytical reasoning, writing, speaking, and listening capabilities in the humanities, social sciences, or natural sciences (particularly those courses requiring research and communication skills). Overall academic performance is essential; a cumulative average of at least 3.00 is required by almost all accredited law schools.

Students interested in attending law school should contact Prof. John Shea, Department of Political Science and director of the pre-law program in Room 106, Ruby Jones Hall, early in their academic careers. Students also are encouraged to participate in the Law Club.

Pre-Engineering. West Chester provides a pre-engineering program in cooperation with The Pennsylvania State University. At the end of five years, a student earns a B.S. in physics from West Chester University and a B.S. in engineering from The Pennsylvania State University. Students normally spend three years at West Chester University and two years at Penn State University, taking only engineering-related courses. All mathematics, physics, cognates, and general education courses are generally taken at West Chester University. Students may choose from 14 fields of engineering listed in the "Physics" section of this catalog.

Pre-Theology. Pre-seminary students tend to major in religious studies under the auspices of the Department of Philosophy but select courses from a wide variety of disciplines. Students interested in graduate studies in theology and religious studies should work out their programs of study with the Department of Philosophy.

Center for Academic Excellence

The Center for Academic Excellence helps students attain excellence in their academic pursuits through a variety of services.

The **Undeclared Major Program** allows students who have not yet chosen a major to explore their fields of interest before entering a degree program. During their freshman and sophomore years, students are encouraged to schedule courses which fulfill the General Education Requirements. In addition to the General Education Requirements, other courses may be scheduled in a wide range of disciplines. Academic advisers will help the students to select and schedule appropriate courses.

Students should understand that certain academic programs require prerequisites for further study. Completion of such prerequisites, if not undertaken during the period of study as an undeclared major, may prolong University attendance.

A student may transfer into a program from undeclared status only if

1. There is a vacancy in the desired program,
2. The chairperson of that program approves, and
3. A formal approved change of curriculum form has been filed in the Office of the Registrar.

Students should inquire about program vacancies as early as possible during their first year of study.

The Undeclared Major Program is administered by the Academic Advising Center located in Lawrence Center, rooms 105 and 132.

The **Academic Advising Center** provides the following services for students who have not yet declared a major:

- Advice regarding course selection
- Assistance in establishing educational objectives
- Information regarding various programs offered by the University
- Advice to students in academic difficulty
- Referral to University support services
- Guidance in and instructions for declaring a major
- Interpretation of University, school, and department regulations, rules, and requirements.

The center also makes information regarding University services available to late afternoon and evening students. For more information call 610-436-3505, or visit rooms 105 and 132, Lawrence Center.

The **University Tutoring Center** offers tutoring free to registered students at the University. The center's basic focus is on assisting students not only to master course content, but also to become independent learners. Most of the resources at the center are focused on freshmen and on those students enrolled in developmental, basic skills, and general education courses. Tutoring is usually offered in mathematics, writing, natural sciences, social sciences, and foreign languages. Sessions are scheduled on an hourly basis, by appointment only, though some drop-in tutoring is available in lower-level mathematics courses. Interested students should make tutoring appointments as early as possible in the semester to ensure placement. The center is open daily and several evenings each week. Call 610-436-3505 for more information or visit the center in room 105 Lawrence Center.

The **Academic Development Program** is designed to provide an opportunity for a college education at West Chester University to those students who do not meet current admission requirements but who show a potential for success in college. Students admitted to the program are expected to take advantage of the program components which have been developed to enhance their skills in reading, writing, speaking, mathematics, and critical thinking, as well as to help them in their transition from high school to college.

The Academic Development Program comprises of a series of required courses supplemented by specialized tutoring, counseling, scheduling, and advising.

The program begins with intensive, six-week preparatory courses during the summer which students must complete. Developmental course work is credit-

bearing, but these credits are not applicable toward graduation.

Students in the program also are required to complete the following courses: ENG 120, ENG 121, COM 101, and EDR 100, all of which should be taken as soon as possible after completion of summer requirements. All of these courses satisfy University requirements for graduation. Students will be advised also on the completion of General Education Requirements and, as necessary, on the transition to a major course of study.

For further information, please contact Dr. Peter T. Kyper, Director, Academic Development Program, 105 Lawrence Center, 610-436-3505.

The Office of Services for Students with Disabilities provides students with physical disabilities early course scheduling; adaptive computer, cassette tape, and other educational equipment; assistance acquiring Office of Vocational Rehabilitation (OVR) and financial support; student counseling support; student support groups; and a liaison to professors and other campus offices regarding students' special needs.

For students with learning disabilities, the office provides diagnostic service information as well as information about relevant external resources, educational equipment, student counseling support, student support groups, classroom accommodations, early class scheduling, and a liaison to professors and other campus offices regarding the special needs of students with learning disabilities.

The staff of the Office of Services for Students with Disabilities is located on the second floor of Lawrence Center. For more information, call 610-436-3416.

Currently, the following buildings are accessible to students with physical disabilities:

Main Hall
Anderson Hall
Francis Harvey Green Library
Recitation Hall
Elsie O. Bull Center
Ruby Jones Hall
Mitchell Hall
McCoy Center Classroom Facility
Ramsey Hall
Schmucker Science Center
South Campus Field House
Special Education Building
Farrell Stadium
Swope Hall
Sykes Union (from rear entrance)
Sanderson Hall
Tyson Hall
Goshen Hall
Lawrence Center
Maintenance Building
Hollinger Field House
Ehinger Gymnasium
Reynolds (partial)
Schmidt Hall
Wayne Hall
Emil H. Messikomer Hall
(Office of Admissions)
Philips Memorial
(Auditorium and first floor administrative offices)
Peoples Maintenance Building
Exton Corporate Center

The Study Skills Project is a one-credit, self-paced, computer-assisted learning strategies course that helps students gain proficiency in time management, mastering a reading assignment, taking notes, studying to remember, and other study skills. For more information, call Dr. Mary Keetz at 610-436-2174.

The Writing Program

West Chester University's cross-disciplinary Writing Program was begun in 1978 as a pilot project funded by the National Endowment for the Humanities and the Pennsylvania State College Educational Trust Fund. Building on the skills developed in English composition courses, the program is based on the assumption that writing is integral to all academic learning in liberal and professional studies. The program's focus is therefore not on remediation but on enhancement; the University regards writing as much more than a set of basic language skills. The program provides for:

(1) *Writing-emphasis courses each semester* in traditional liberal studies (for example, English literature, history, anthropology, sociology, chemistry, and physics) and in professional studies (for example, criminal justice, early childhood education, nursing, and public health)

(2) *A general requirement that all students must take three of these writing-emphasis courses*, in addition to English composition, before their senior year

(3) *In-house lectures, seminars, and workshops on writing* for faculty members in all disciplines

The WCU Writing Program has been recognized for its scope and achievement by the Association of American Colleges. It also has sponsored the Pennsylvania Writing Project, an outreach program for teachers in local schools. The Writing Program is administered by a director and a committee of one student and seven faculty members representing different fields of study.

Internships

A number of departments offer the opportunity for internships, field experiences, or practicums in which students may earn credit through employment in their field of interest. Additional information is available under the various department listings in this catalog and from the individual departments.

Three University-wide internship opportunities are open to students from any major: **The Harrisburg Internship Semester (THIS)** is a full-semester, 15-credit experience in Pennsylvania state government. It is open to any junior or senior who has a minimum GPA of 3.50. A stipend is involved. (See Department of Political Science, HBI 400, 401, 402.) **The Washington Center Internships** are 15-credit experiences with the U.S. Congress, Executive Branch, interest groups and lobbies. **The Pennsylvania House of Representative Legislative Fellowship Program**, open to all junior/senior students with a minimum GPA of 3.50, involves committee staff assignments in policy development and a stipend. All three programs are administered by the Department of Political Science.

Summer Sessions

West Chester University's summer program, among the oldest university-sponsored summer programs in the United States, has one of the largest enrollments in the State System of Higher Education. More than 600 courses, both graduate and undergraduate, are offered, including workshops, seminars, and internships, as well as the usual classes. Offerings are available in every department and in interdisciplinary areas.

Students from any college or university, as well as nontraditional students, may take courses for enjoyment, personal growth, or degree credit. The summer program runs for 12 weeks (two, three-week sessions and one, six-week

session), and a student can earn up to 12 credits during the summer sessions.

Summer session booklets, containing the course schedules and registration cards, may be obtained from the Office of the Registrar (undergraduate) and the Office of Graduate Studies and Sponsored Research (graduate). For more information contact the Office of the Registrar at 610-436-2230 or the Office of Graduate Studies at 610-436-2943.

University College

The University College, which was created in 1985, focuses on the programmatic and service needs of adult learners. It works with individual students, as well as with civic, social, governmental, and corporate entities to identify educational and training needs. It responds to these needs by offering a varied program of credit and non-credit courses, workshops, and seminars designed to meet the needs of individual adults as well as the particular needs of business and governmental organizations. The University College is organized into three centers: The Center for Adult, Evening, and Alternative Studies; The Center for Business, Industry, and Government; and The Center for Community Education.

The Center for Adult, Evening, and Alternative Studies coordinates the evening studies program and all continuing education credit courses. The evening program offers basic courses that meet the general education requirements and elective portions of most four-year degree programs. In addition, students can earn a bachelor's degree in the evening in the following areas:

- Accounting
- Chemistry
- Computer Science
- Criminal Justice
- Geography and Planning
- History
- Liberal Studies
- Management
- Marketing
- Psychology

Services available to adult learners include:

- Telephone Registration
- Academic Advising
- Tutoring
- Career Information and Guidance
- Daytime Child Care
- Personal and Family Counseling
- Financial Aid

Many adult learners have acquired a great deal of knowledge outside the framework of a formal institution of higher education—knowledge which may be equivalent to that attained in college courses. The Center for Adult, Evening, and Alternative Studies advises students on how to earn college credit for that knowledge. Available programs include:

- Credit by Examination
- The CLEP Program
- Portfolio Development and Assessment

The Center for Adult, Evening, and Alternative Studies coordinates the off-campus center at Exton, which offers graduate and undergraduate business, liberal arts, and education courses.

The Center for Business, Industry, and Government (CBIG) is an educational resource office for business, industry, and government. It responds to requests from the corporate community for needs assessments, training proposals, referral services, and more. It also provides a variety of services to small businesses, nonprofit organizations, and government agencies.

Services available to business, industry, and government include:

- "No charge" needs assessments
- Custom-designed education and training programs held on site
- Referral services for businesses seeking student interns, faculty consultants, job candidates, and University information
- Cosponsorship of business community events
- Short courses, seminars, and workshops held on campus for business

CBIG can offer virtually any noncredit training program requested in the workplace, since it calls on national experts when University resources are not available. Following is a small sample of the broad selection of offerings:

- Management Skills for the First-Time Supervisor
- Conflict Management and Resolution
- Managing People
- Communication Skills Workshop
- Project Management
- Finance and Accounting for the Nonfinance Manager
- Improving Customer Service
- Managing Technical Organizations

The Center for Community Education is responsible for all noncredit activities the University offers to the community at large. The center has a variety of continuing education programs for adults who wish to continue their education, but who do not necessarily seek college credit. The courses, which often give students more opportunities in the job market, cover topics such as:

- Real Estate
- Computer Skills
- Financial Planning
- Professional Development
- Family and Health Issues

The courses offered through these centers may carry undergraduate or graduate credit, in-service credit, continuing education units, or no credit at all.

The University College also arranges for the rental of University facilities by outside organizations. Available areas include:

- Classrooms
- Conference rooms
- Sports complex
- Training facilities

For information about any of the above programs, contact the University College, Room 144, Elsie O. Bull Center, 610-436-3550.

Veterans Affairs

Under the provisions of Title 38, West Chester University is an accredited university for the education of veterans. The University cooperates with the Veterans Administration to see that honorably separated or discharged veterans receive every consideration consistent with either degree or nondegree admission standards.

All veterans, certain dependents of disabled or deceased veterans, and war orphans who wish to obtain educational benefits under the appropriate public laws must register with the office of Veterans Affairs at initial registration. Veterans must renew their registration with this office at the beginning of each subsequent semester and each summer session. The Veterans Administration requires students who are veterans to schedule at least 12 semester hours per semester in order to receive full benefits under the GI Bill.

A representative of the Veterans Administration is in the Office of Financial Aid, Room 138, Elsie O. Bull Center, counseling and acting as liaison between students and the Veterans Affairs Office in financial and other matters.

Armed Services Programs

Army Reserve Officers' Training Corps (ROTC) is available through a cross-enrollment agreement with Widener University. All classes are conducted on the campus of Widener University. Students receive from 1.5 to 3.0 free elective credit hours per course (maximum 12 credit hours) towards their baccalaureate programs.

West Chester students also may enroll in the Air Force Reserve Officers' Training Program (AFROTC) through a cross-enrollment agreement with Saint Joseph's University. All aerospace studies courses are held on the Saint Joseph's University campus.

The University, with the approval of the Council of Trustees, permits West Chester University students enrolled in the Armed Services Reserve Officer Candidate Program (ROC) to receive six semester hours of baccalaureate credit upon successful completion and certification of ROC military requirements. These credits are classified as free elective transfer credits. Depending on the status of the student's program at the time of ROC credit transfer, these credits will be counted toward, or in excess of, the 128 credits required for a baccalaureate degree.

ROC programs are contingent on successful completion of a military requirement during vacation and the award of a college degree before being granted the service commission. The programs cover the Navy's Basic and Advanced Reserve Officer Candidate courses (held on the Villanova University campus) and the Marine Corps Junior and Senior Platoon Leadership courses.

West Chester University students may enroll in the United States Marine Corps Platoon Leaders Class as freshmen, sophomores, and juniors. This program is open to men and women. All training is done during summer vacation, and reserve officer commission credits will be counted upon successful completion of military requirements and the successful completion of a University degree. Students interested in the Platoon Leaders Class should contact the chair of the Department of Educational Services at West Chester University.

Graduate Studies

West Chester's graduate programs, introduced in 1959, offer study opportunities leading to Master of Education, Master of Arts, Master of Science in Administration, Master of Business Administration, Master of Science, and Master of Music degrees. West Chester schedules its graduate courses in the late afternoon and evening during the fall and spring semesters. It is possible to pursue full-time graduate study during the academic year and during summer sessions.

Administration

M.S.A. (Concentrations: Health Services, Individualized, Leadership for Women, Psychology/Personnel, Public Administration, Sport and Athletic Administration, Training and Development, Urban/Regional Planning)
Cooperative Certification in Administration with Clinical Chemistry

Biology

M.A. Biology

Business

M.B.A. (Concentrations: Economics/ Finance, General Business, Management)

Chemistry

M.A. Physical Science (Concentration: Chemistry)
M.Ed. Chemistry
M.S. Chemistry
M.S. Clinical Chemistry

Childhood Studies and Reading

M.Ed. Elementary Education (Concentrations: Creative Teaching-Learning, Early Childhood Education, Elementary Education, Gifted and Talented, Human Development, Language Arts, Reading, Social Studies)
Certification in Elementary Education
M.Ed. Reading
Reading Specialist Certification
Certificate of Advanced Graduate Study in Childhood Studies and Reading

Communication Studies

M.A. Communication Studies

Communicative Disorders

M.A. Communicative Disorders

Counselor, Secondary, and Professional Education

M.Ed. Elementary School Counseling
M.Ed. Secondary School Counseling
M.S. Higher Education Counseling
M.S. Educational Research
Specialist I Certificate in Counseling (Elementary or Secondary)
M.Ed. Secondary Education
Courses in Environmental Education; Urban Education

Criminal Justice

M.S. Criminal Justice

English

M.A. English

Foreign Languages

M.A. French
M.A. Spanish
M.Ed. French
M.Ed. German
M.Ed. Latin
M.Ed. Spanish

Geography and Planning

M.A. Geography
M.S. Administration (Concentration: Urban/ Regional Planning)

Geology and Astronomy

M.A. Physical Science (Concentration: Earth Sciences)

Health

M.Ed. Health
M.S. Health
M.S. Administration (Concentration: Health Services)

History

M.A. History
M.Ed. History

Instructional Media

M.Ed. Instructional Media Education
M.S. Instructional Media
Teaching Certification for Instructional Media Education

Leadership for Women

M.S.A. (Concentration: Leadership for Women)

Mathematics and Computer Science

M.A. Mathematics (Concentrations: Pure Mathematics, Mathematics Education)
M.Ed. Mathematics
M.S. Computer Science

Music

M.A. Music History and Literature
M.M. Accompanying
M.M. Keyboard Performance
M.M. Piano Pedagogy
M.M. Instrumental Performance
M.M. Music Education
M.M. Music Theory and Composition
M.M. Vocal and Choral Performance

Nursing

M.S.N. Community Health Nursing

Philosophy

M.A. Philosophy

Physical Education

M.S. Physical Education (Concentrations: General Physical Education, Exercise and Sport Physiology)
M.S.A. (Concentration: Sport and Athletic Administration)

Physical Science (Interdepartmental)

M.A. Physical Science (Concentrations: Chemistry, Earth Sciences)

Political Science

M.S.A. (Concentration: Public Administration)

Psychology

M.A. Clinical Psychology
M.A. General Psychology
M.A. Industrial/ Organizational Psychology
M.A. Group Psychotherapy/Processes (Certification: Psychodrama)

M.S.A. (Concentrations: Individualized, Psychology/Personnel, Training and Development)

Public Administration

See Political Science

Special Education

M.Ed. Special Education
Certification in Special Education

Teaching English as a Second Language

M.A. Teaching English as a Second Language

The following departments and interdisciplinary areas offer graduate courses, but no graduate degree: Anthropology and Sociology, Art, Linguistics, Social Work, Theatre Arts, Women's Studies.

Scholarly Publications

College Literature is an international, triannual journal of scholarly criticism dedicated to the needs of college/ university teachers by providing them with access to innovative ways of studying and teaching new bodies of literature and experiencing old literatures in new ways. Kostas Myrsiades of the Department of English serves as editor.

Journal of the Hellenic Diaspora is a semiannual, international scholarly review focusing on the Greek experience of the 19th and 20th centuries, published at West Chester University by Pella Publishing Co. of New York. Kostas Myrsiades, Department of English, serves as editor.

Degree Requirements

REQUIREMENTS FOR THE BACCALAUREATE DEGREE

1. Satisfactory completion of a minimum of 128 semester hours at or above the 100 level, distributed as shown in the curriculum for the student's major field.
2. Achievement of a cumulative Grade Point Average (GPA) of at least 2.00 (C) and an average of at least 2.00 (C) in the major field.
3. Attendance at West Chester University for at least 30 semester hours of the degree program, normally the final 30 semester hours of the degree program.
4. Fulfillment of any special requirements or program competencies that are particular to a department or a school.
5. Fulfillment of all financial obligations to the University, including payment of the graduation fee, and of all other obligations, including the return of University property.
6. Compliance with all academic requests, including filing an application for graduation in the Office of the Registrar.

NOTES

All students (entering freshmen and transfers) are bound by the catalog in the year in which they first enter for meeting general education requirements. West Chester defines "enter" as the first semester of study as a degree candidate during the fall or spring semester. Students are bound by the major, minor, and cognate requirements in the catalog at the time they are accepted into the major or minor. If any of the degree requirements change while students are matriculating, they *may, but do not have to,* meet changed requirements after their first semester of study as a declared major. In some instances, accrediting and/or certification standards necessitate the change in major, minor, and cognate requirements. In such situations, the respective school or college will formally inform each student that he or she must meet the new requirements. Readmitted students are bound by the requirements in the major, minor, and cognate areas at the time of readmission, except where permission is granted by the respective department.

Students are permitted to pursue dual majors under the same degree with the concurrence of the participating departments.

Students who do not demonstrate basic proficiency in English or mathematics may be required to take 000-level courses as prerequisites of their degree programs. These courses do not count towards graduation.

UNI 101: The Student and the University

A one-credit course in college adjustment and exploration is taken as part of the New Student Orientation Program. Graded on a pass/fail basis, this course is required of all new freshmen and of all new transfer students who transfer fewer than 33 credits.

The General Education Requirements Common to All Baccalaureate Curricula

A broad education emphasizes the enhancement of the basic skills in English and mathematics, as well as encompasses experiences in the humanities, the social and natural sciences, and the arts. At the same time, it must be versatile because of the many new courses and areas of study that are constantly becoming available.

West Chester University's curriculum has been planned to allow freedom of choice for the student within educationally sound limits.

The general education requirements that constitute the liberal arts core apply to all freshmen entering West Chester in June 1980 and thereafter.

All students should consult with their advisers and their departmental handbooks.

BACCALAUREATE GENERAL EDUCATION REQUIREMENTS

Policy on General Education Requirements

Students, both those matriculating as freshmen and transfer students, who have not completed the basic skills requirements in mathematics and English by the time they have earned 64 credits toward graduation must have the permission of the dean of their school or college (or his or her designee) to schedule additional courses. This policy applies to students entering in the fall of 1988 and thereafter.

A total of 50 semester hours of general education requirements must be completed for a baccalaureate degree. Those 50 credits are allocated among English composition, mathe-

matics, science, behavioral and social sciences, humanities, the arts, physical education or health, and free electives. Credit requirements for each area are provided in the following list. NOTE: Except for the nine free elective semester hours under Category IV, courses taken to satisfy general education requirements may not be taken Pass/Fail. This includes courses taken to satisfy interdisciplinary and writing emphasis general education requirements.

Specific general education courses may be required by a major or minor program, but no course may have its numeric credits duplicated in any application. A student may use the course from one major to meet the requirements of the second major. In this case, the adviser will work with the student to determine which course(s) should be used to address any remaining credits. But in no case may a student graduate with less than 128 credits. Students should be aware that, although general education requirements have been met, major degree requirements may necessitate a specific minimum performance level in general education courses, e.g., a grade of C– or better.

Examples of general education courses which also fulfill program requirements are: (1) ECO 112 is a business and economics core requirement and also serves as a second component in fulfilling a general education requirement; (2) BIO 110 is a biology requirement and serves as a general education option.

Consult your major degree program for guidance.

I. Basic Skills 11 semester hours

A. English Composition 6 semester hours
ENG 120, ENG 121
Policy for placement in English composition courses: Placement in the appropriate composition course is determined by the score on the Test of Standard Written English (TSWE). Students with TSWE scores from 58 to 60 are tentatively placed in ENG 121; those with scores from 45 to 57 in ENG 120: those with scores of 44 or below in ENG 020. The Department of English administers a Placement Confirmation Essay during the first week of the semester to confirm these placements. In cases where the Placement Confirmation Essay indicates that a student has been misplaced on the basis of the TSWE, the department will immediately transfer a student to the appropriate course. A student enrolled in ENG 020 must pass with a grade of C– or better before he or she enrolls in ENG 120. Non-native, English-speaking students seeking admission to ENG 030, ENG 130, and ENG 131 must consult the English as a Second Language (ESL) program staff for a placement evaluation prior to registering for these courses. ENG 130 and 131 are comparable to ENG 120 and 121 for non-native, English-speaking students only. Because all students must take and pass both ENG 120 (130) and ENG 121 (131) to graduate, and no substitution of other courses satisfies this requirement, a student who fails either of these courses after three attempts will be dismissed immediately following the third failure regardless of GPA.

B. Mathematics 3 semester hours
College-level mathematics course designated by the student's major department.
Policy for placement in mathematics: Placement in the appropriate mathematics course is determined by the student's math SAT score or performance on the Mathematics Placement Examination administered by the Department of Mathematics and Computer Science. All entering freshmen with SAT scores below 450 must complete MAT 000 with a grade of C– or better unless they are an early childhood, elementary, or special education major, in which case they take MAT 001 before they enroll in any other mathematics course. Any student, regardless of major, who scores below 400 on the SAT must take MAT 001. Students who score below 450 on the SAT, but who take and pass the departmental math placement test during the summer orientation, may place out of the developmental math levels and enroll directly into the college-level (100) mathematics courses.

C. Physical Education Activity 2 semester hours
Students may, for medical reasons, petition to substitute a health course for the physical activity requirement. Veterans are exempt from the physical activity requirement. Only courses with the PEA prefix meet the physical education activity general education requirement except for those students whose majors have obtained University approval for PED courses.

II. Distributive Requirements 27 semester hours
(Approved courses are noted with a ★ in the course listings and below.)*
NOTE: Some approved courses are two-semester courses, e.g., CHE 103-104, ECO 111-112.

A. Science 9 semester hours
One approved course in three of the following areas:
Biology — BIO 100 or BIO 110
Chemistry — CHE 100, or CHE 102, or CHE 103-104, or CHE 105-106, or CHE 107
Computer Science – CSC 101, or CSC 115, or CSC 141
Earth Science — ESS 101 or ESS 111
Physics — PHY 100, or PHY 130-140, or PHY 170-180

B. Behavioral and Social Sciences 9 semester hours
One approved course in each group plus a third course in a discipline not previously selected:
Group I
Anthropology — ANT 102 or ANT 103
Psychology — PSY 100
Sociology — SOC 200 or SOC 240
Group II
Economics — ECO 101 or ECO 111-112
Geography — GEO 101 or GEO 103
Government — PSC 100, or PSC 121, or PSC 213

C. Humanities 9 semester hours
One approved course in each of the following areas:

*Students may substitute an approved two-semester, entry-level course marked with a † for a course marked with a *. For example, PHY 130-140 may be substituted for PHY 100. Transfer students who have taken one-half of a six-credit foundation course in a discipline may fulfill the appropriate distributive requirement by taking the other half of this foundation course at West Chester. Students should obtain clearance from their adviser before making substitutions of this type.

Literature — LIT 165, CLS 165, or CLS 260-261
History — HIS 101, HIS 102, HIS 150, or HIS 151-152 (NOTE: Students who took HIS 100 and failed should take HIS 102 for the repeat.)
Philosophy — PHI 101 or PHI 180

III. The Arts 3 semester hours
Any courses in the following areas: art, cinematography, dance, music, photography, and theatre

IV. Free Electives 9 semester hours
Free electives are selected by the student. They may not be used to satisfy major, core, cognate, or general education (including distributive) requirements. They may, however, be used to fulfill the requirements of a second major (determined by date of declaration). All of these free electives must be at or above the 100 level.

All students are encouraged to complete the above requirements in their first two years at West Chester.

V. Writing Emphasis Courses
All students who enter with fewer than 40 credits must take at least three approved writing emphasis courses at West Chester. Transfer students who enter with 40-70 credits must take two writing emphasis courses. Students who transfer more than 70 credits must take one writing emphasis course. ENG 120 and 121 do *not* count as writing emphasis courses. Each writing emphasis course may simultaneously fulfill another degree requirement. Writing emphasis courses may not be transferred to West Chester.

VI. Interdisciplinary Requirement

A. Freshmen who entered the University in fall 1985 or later must complete an approved interdisciplinary course. Transfer students who enter with 60 credits or more are not required to complete an interdisciplinary course.

B. For students who entered as freshmen or transfers between fall 1985 and spring 1988, an approved interdisciplinary course may be substituted for *any* course in the distributive requirements or in the arts in the general education requirements.

HOWEVER

For students who entered the University beginning with the 1988 fall semester, the process of meeting the interdisciplinary requirement has changed.

C. The interdisciplinary requirement can be fulfilled at one of two levels—the general education level or the upper level.

1. An approved interdisciplinary course (at the 100- or 200-level) may be substituted for any course in the distributive requirements or in the arts in the general education requirements.

NOTE: This substitution may be made only once.

2. An approved upper-level interdisciplinary course (at the 300- or 400-level) cannot be substituted for general education requirements.

D. ENG 121, Effective Writing II, is a prerequisite for all interdisciplinary requirement courses.

E. Approved interdisciplinary courses are indicated by a pound sign (#) in the departmental course listings and below.

NOTE: A course may simultaneously meet the interdisciplinary and foreign culture cluster requirements.

Interdisciplinary Courses

AMS	200	American Civilization
AMS	210	Mass Media and Popular Culture
BIO	102	Humans and the Environment
CLS	201	Classical Mythology in the 20th Century
CLS	329	Gender and Peace
CLS	370	Literature, Medicine, and the Arts
CLS	371	Law, Literature, and Communication
ECO	344	American Economic Experience
EFR	220	French Civilization (in English)
EGE	222	German Civilization (in English)
EGE	323	Austrian Civilization, 1848-1938
ENV	102	Humans and the Environment
ERU	209	Soviet Russian Culture (in English)
ESP	219	Civilization of Spain (in English)
ESP	222	Latin-American Culture and Civilization (in English)
ESP	324	Puerto Rican Language and Culture
ESP	362	Beyond Columbus
ESS	102	Humans and the Environment
GEO	204	Introduction to Urban Studies
GER	221	German Civilization (in German)
HIS	302	Modern India
HIS	306	Chinese Civilization
HIS	308	An Introduction to the Islamic World
HIS	323	Austrian Civilization
HIS	329	Gender and Peace
IND	201	Unified Science I
LIN	330	Introduction to Meaning
LIT	162	Literature of the Apocalypse
LIT	250	Victorian Attitudes
LIT	270	Urbanism and Modern Imagination
LIT	309	Martin Luther King
MHL	201	Form and Style in the Arts
PHI	102	Introduction to Religious Studies
PHI	174	Principles of the Arts
PHI	330	Introduction to Meaning
PHI	370	Biomedical Ethics
PHI	405	Feminist Theory
PSC	204	Introduction to Urban Studies
SCB	210	The Origin of Life and the Universe
SOC	349	Perspectives on Mental Illness
SSC	200	Introduction to Peace and Conflict Studies
SSC	201	Global Perspectives
WOS	225	Women Today—An Introduction to Women's Studies
WOS	315	Third World Women: Tradition and Change
WOS	329	Gender and Peace
WOS	405	Feminist Theory

NOTE: These courses might not be taught as interdisciplinary courses every semester. Students should therefore check the current Master Schedule for each course's interdisciplinary status for that semester.

NOTE: There are particular honors courses that have been approved as interdisciplinary at the 300 and 400 levels. Honors students should discuss these courses with the director of the Honors Program.

VII. Supplementary General Education Requirements
Students in some programs have additional general education or cognate requirements to fulfill in disciplines

related to their major discipline. Some programs may require a speech course. Students should consult with their major program adviser about the requirements that apply to them.

Foreign Language and Culture Requirements for Bachelor of Arts Degree Candidates

A. Candidates for the B.A. in the following departments are required to complete the second half of the intermediate year of a foreign language:
   Art
   Biology
   English
   Foreign Languages (in a second foreign language)
   Liberal Studies
   Mathematics
   Physics
   (Freshmen interested in other B.A. degree programs are urged to consult with their departmental advisers regarding the foreign language requirements of the particular programs.) Students may satisfy the foreign language requirement by presenting evidence of preparation equivalent to the 202 level either by certificate or by examination. Students who are not qualified to take the 202 course prepare themselves by taking the elementary (101-102) and/or intermediate (201) course or courses.

B. Candidates for the B.A. in other departments have the options of demonstrating foreign language competence through the intermediate level or else demonstrating foreign language competence through the Elementary II (102) level and by taking three courses dealing with the related foreign cultural area. Questions regarding the foreign language requirement in these other departments should be addressed to their appropriate department chairpersons. The foreign language plus foreign cultures option is open to freshmen who entered after May 1980.

C. Attention is called to the policies regarding taking courses out of sequence, page 41. Testing and placement are handled by the Department of Foreign Languages.

Foreign Culture Clusters

Students selecting the foreign language plus foreign culture option must take three courses in at least two separate disciplines, except that only one course may be taken in the department or discipline in which the student is majoring. All three courses must be selected from the cluster of courses pertaining to the foreign culture area of the language studied. Approved courses are listed below. Courses taken for foreign cultures credit may not be taken Pass/Fail.

I. Classical Civilization (Latin or Greek)
   Approved courses: ARH 382, ARH 485, HIS 318, HIS 319, HIS 348, PHI 270

II. France and Francophone Area (French)
   Approved courses: ARH 383, ARH 385, EFR 220, GEO 303, HIS 420, HIS 427, HIS 435, PHI 415, PSC 342

III. Germany (German)
   Approved courses: EGE 222, EGE 323, GEO 303, HIS 323, HIS 330, HIS 420, HIS 423, HIS 435, PHI 272, PHI 273, PSC 342

IV. Italy (Italian)
   Approved courses: ARH 384, HIS 426, PSC 342

V. Latin America (Spanish or Portuguese)
   Approved courses: ANT 322, ANT 362, CLS 311, ESP 219, ESP 222, ESP 311, ESP 324, ESP 403, GEO 302, HIS 315, HIS 316, HIS 317, PSC 340

VI. Russia and Eastern Europe (Russian or an Eastern European Language)
   Approved courses: ARH 405, ERU 209, GEO 304, HIS 324, HIS 425, PSC 246

NOTE: A course may simultaneously meet the interdisciplinary and culture cluster requirements.

REQUIREMENTS FOR THE DEGREE OF ASSOCIATE OF ARTS OR ASSOCIATE OF SCIENCE

Students in the associate degree programs must fulfill the following requirements:

1. Satisfactory completion of a minimum of 64 semester hours at or above the 100 level
2. Completion of the Associate of Arts or Associate of Science General Education Component
3. Completion of an approved area of concentration
4. Achievement of a cumulative grade point average of at least 2.00 (C) and an average of at least 2.00 (C) in the area of concentration
5. Attendance at West Chester University for at least 30 semester hours, normally the last 30 hours, of the degree program
6. Fulfillment of any special requirements or program competencies that are particular to a department or school
7. Fulfillment of all financial obligations to the University, including payment of the graduation fee; and of all other obligations, including the return of University property
8. Compliance with all academic requests including filing and application for graduation in the Office of the Registrar

ASSOCIATE OF ARTS IN LIBERAL STUDIES

West Chester University offers an Associate of Arts in liberal studies that can be completed in two years of full-time study or the appropriate equivalent of part-time study.

Students currently enrolled in the University who wish to obtain an A.A. must declare their intention prior to the completion of 50 semester hours. A total of 64 semester hours must be completed to earn this associate degree. The credits are allocated among the following areas of study:

The A.A. Liberal Studies is being suspended. Contact the director of Liberal Studies for more information.

I. A.A. General Education Component 38 semester hours
   A. THE PAST 6 semester hours
      One course in each of the following disciplines:
      Anthropology — ANT 102 or 103
      History — HIS 101, HIS 102, HIS 150, or HIS 151-152

(NOTE: Students who took HIS 100 and failed should take HIS 102 for the repeat.)

B. THE PRESENT 6 semester hours
One course in two of the following disciplines:
Economics — ECO 101, or ECO 111 and 112
Political Science/Planning — PSC 100, or PSC 121, or PSC 213
Psychology — PSY 100
Sociology — SOC 200 or SOC 240

C. THE IDEAS OF CIVILIZATION 6 semester hours
One course in each of the following disciplines:
Literature — LIT 165, or CLS 165, or CLS 260 and 261
Philosophy — PHI 101 or 180

D. THE SCIENCES 6 semester hours
One course in two of the following disciplines:
Biology — BIO 100 or BIO 110
Chemistry — CHE 100, or CHE 102, or CHE 103 and 104, or CHE 105 and 106
Computer Science — CSC 101, or CSC 115, or CSC 141
Earth Science (Geology or Astronomy) — ESS 101 or ESS 111
Physics — PHY 100, or PHY 130 and 140, or PHY 170 and 180

E. THE ARTS 6 semester hours
One course in two of the following disciplines: art, cinematography, dance, music, photography, and theater

F. SKILLS AREA
English Composition* 3 semester hours
Mathematics* 3 semester hours
Health or Physical Education 2 semester hours

II. Approved A.A. area of concentration 15-21 semester hours

III. Free electives 5-13 semester hours

Approved Associate of Arts Concentrations

An Associate of Arts concentration generally consists of the same sequence of courses as a minor in the subject when the minor has been approved as a concentration. See the individual program listings for specifics.

The areas of concentrations approved for the degree of Associate of Arts in liberal studies include the following:

Anthropology
Anthropology/Sociology
Art History
Astronomy
Communication Studies
Criminal Justice
Developmental Disabilities
Earth Science
Film Criticism
Geology
History
Holocaust Studies
Literature
Peace and Conflict Studies
Philosophy
Planning (Geography)
Political Science
Sociology
Studio Arts
Theatre
Women's Studies
Writing

Students also may develop an individualized concentration of 15 to 21 semester hours of courses selected under advisement. Further information about an A.A. in liberal studies is available from the Office of Liberal Studies in Main Hall.

Free Electives

In addition to the requirements in the area of concentration, candidates for the degree of Associate of Arts in liberal studies have the opportunity to take two or three courses of their own choosing. Students who contemplate continuing in a four-year program requiring competence in a foreign language are advised to select courses that will help them achieve this competence.

ASSOCIATE OF SCIENCE

West Chester University offers the Associate of Science degree in two specialized fields—respiratory therapy and applied media technology. For detailed information on these programs, see the Department of Health (pages 120–123) and the Department of Instructional Media (pages 114–115).

*On the basis of proficiency or placement tests, some students may be required to take 000-level courses in English or mathematics as prerequisites for their degree programs.

Academic Policies and Procedures

Classification by University Program

Degree Candidates—all undergraduates admitted to a degree program or to the undeclared major by the Office of Admissions or through approved internal transfer recorded in the Office of the Registrar.

Nondegree Students—students permitted to enroll part time (maximum nine credits) for course work toward professional development, personal growth, or certification. Recent high school graduates (within the previous two years) are required to meet the admission standards of the University. Transfer students may enroll nondegree if they have attempted less than 30 credits and have a 2.5 grade point average. Nondegree students may attempt a maximum of 18 credits. Upon reaching 18 credits, students must have a 2.00 GPA to be eligible for admission to a degree program or to request permission to enroll with professional development status.

Academic Classification

The student's classification is determined by the number of semester hours of credit earned as follows:

Freshman 0-31 semester hours of credit (inclusive)

Sophomore 32-63 semester hours of credit (inclusive)

Junior 64-95 semester hours of credit (inclusive)

Senior 96 or more semester hours of credit

NOTE: The cumulative Grade Point Average (GPA) is computed from the total number of credits attempted. (See "Cumulative Grade Point Average," page 43.)

Academic Advising

Under West Chester's advising program, all students have faculty advisers, appointed through their major departments, who counsel them on academic matters throughout their undergraduate years. Students who have not yet

declared a major are advised by the Academic Advising Center in Lawrence Center. The ultimate responsibility for satisfying all graduation requirements is the student's.

Field Placement in Schools

West Chester University does not place students at religiously affiliated schools when that placement results in the student's receiving academic credit (e.g., student teaching). In addition, the University will make every attempt to place students first into public (vs. private) schools for student teaching and related activities. Further, students will not be assigned student teaching or other related duties at nonsectarian private schools or agencies unless they specifically request such placement. Each request will be considered individually to ensure that the private entity does not receive special benefit from the arrangement which outweighs the benefit to the University and its students.

Second Degrees

An individual may pursue a second degree at West Chester University after earning the first degree either at West Chester or some other institution. Such an individual must apply for admission through the Office of Admissions as a transfer student and earn at least 30 hours on campus beyond the requirements of the initial baccalaureate program. All requirements for the curriculum in which the second degree is earned must be satisfied. A given course required in both the degree programs is not repeated for the second degree.

Dual Degrees

West Chester does not permit a student to pursue two degrees simultaneously except in the case of the Associate of Science degrees and in the five-year program in engineering in cooperation with Pennsylvania State University.

Double Major

A student may select two majors within the same degree. In this case, a student must meet all of the requirements for both majors. The student should consult regularly with advisers from both programs.

Minor Fields of Study

Students may apply for transcript recognition if they complete an approved minor field of study. To receive such recognition, the student must complete 15 to 21 hours of courses selected in consultation with the minor program adviser. Also, beginning with students entering in the fall 1993 semester, students must earn a minimum GPA of 2.00 in courses taken for a minor in order to receive transcript recognition of that minor. Students who have enough flexibility in their major curriculum to fulfill the requirements of a minor must fill out and submit a Minor Selection Application to the Office of the Registrar. To enroll in a minor field of study, students must have the permission of both their major and their proposed minor departments.

Minors available at West Chester University include the following:
Accounting
American Studies
Anthropology
Anthropology/Sociology
Art History
Astronomy
Athletic Coaching
Biology
Communication Studies
Comparative Literature
Criminal Justice
Dance (Education/Therapeutic)
Dance (Performance)
Developmental Disabilities
Early Childhood Education
Earth Sciences
Economics
Elementary Education
Ethnic Studies
Film Criticism
French
Geography
Geography and Planning
Geology
German
Health Science
History
Holocaust Studies
Instructional Media
Italian
Jazz Studies
Journalism
Latin
Latin American Studies
Linguistics
Literature
Mathematics
Music
Organizational and Technical Writing
Peace and Conflict Studies
Philosophy
Physics
Political Science
Psychology
Public Administration
Religious Studies
Russian
Russian Studies
Social Work
Sociology
Spanish
Studio Art
Theatre
Translation
Women's Studies
Writing

Specific course requirements may be obtained from the minor program advisers.

Changing Majors

A student wishing to transfer from one program of study at the University to another program must file a Change of Curriculum form in the Office of the Registrar. The student must meet the standards for admission to the desired program and must obtain written permission from the department involved. Any courses that were initially accepted for transfer credit from another college are subject to re-evaluation by the department to which the student transfers internally.

Student Class Load

A full-time class load ranges from 12 to 18 semester hours of credit. Credits attempted or earned through the process of Credit by Examination are not counted in the student class load.

Overloads

Students wishing to carry more than 18 credit hours per semester must secure permission. Permission will not be granted for more than 24 hours. The normal student load for the fall and spring semesters is 16 hours per semester. The normal student load for summer sessions is three hours for the pre session, six hours for the regular session, and three hours for the post session. A student will not be allowed to enroll in more than 15 hours in any one summer nor be allowed to carry more than one additional course per session.

A student should not seek permission to carry an overload if his or her cumulative average is below 2.75.

Permission for an overload is granted by the chairperson of the department in which the student is majoring and the associate provost for academic affairs.

Adding a Course

Students may add a course by filing a schedule change form in the Office of the Registrar during the Drop/Add Period. Students will not be permitted to add a course after the end of the Add Period (sixth day of the semester).

Dropping a Course

Students may drop a course by filing a schedule change form in the Office of the Registrar during the Drop/Add Period, thereby receiving no grade. Students will not be permitted to drop a course after the end of the Drop/Add Period (fifth day of the semester).

Withdrawing from a Course

A grade of W (Withdraw) will be entered on the academic record of any student who withdraws from a course *between the end of the first week and before the end of the fifth class week* or the equivalent in summer sessions.

Students may withdraw from a course *between the end of the fifth class week and the end of the tenth class week* and receive a grade of WP (Withdraw Passing) or WF (Withdraw Failing) from their instructor, only if they have a compelling special reason or emergency.

A student who is doing passing work at the time of approved withdrawal receives a WP, which is not treated as a grade. A student who is failing receives a WF, computed as an F.

After the tenth week of classes, students will receive whatever grade the professor assigns (including WF or WP) but are not entitled to selectively withdraw from particular classes. However, if the effective date of official withdrawal is during the last week of classes, a grade (not WP or WF) will be assigned for that course.

STUDENTS WHO FAIL TO WITHDRAW FROM OR DROP A COURSE OFFICIALLY CAN EXPECT TO RECEIVE A GRADE OF F FOR THE COURSE AND ARE FINANCIALLY RESPONSIBLE TO PAY FOR IT.

Withdrawal from the University

Students wishing to withdraw from the University may go to the Office of the Registrar or submit their withdrawal to the office in writing. Written notification is required for all withdrawals. If illness or some other emergency interrupts the student's University work, he or she must notify the Office of the Registrar at once. Unless a student withdraws officially, F grades will be recorded for unfinished courses.

Taking Courses Out of Sequence

Students may not enroll for credit in a more elementary course in a sequence after having satisfactorily passed a more advanced course in that sequence. For example, a student may not enroll for credit in French 101 after having satisfactorily passed French 201.

Similarly, students who enroll in a course that requires less proficiency than placement or proficiency tests indicate they possess may be denied credit towards graduation. Native speakers of a foreign language may not receive credit towards graduation for the elementary course in that foreign language.

Pass/Fail Policy

1. All degree students who are sophomores, juniors, or seniors with a cumulative GPA of at least 2.00 are eligible to take courses Pass/Fail.
2. The Pass/Fail privilege is limited to one course per semester; only free electives may be taken on a Pass/ Fail basis. Free electives are completed at the choice of the student. They may not be used to satisfy major, core, cognate, or general education (including distributive) requirements.
   NOTE: A student may not take an interdisciplinary or writing emphasis course for Pass/Fail if this course is being used to satisfy the general education interdisciplinary or writing emphasis requirement.
3. A grade of *Pass* carries credit value but does not affect the cumulative Grade Point Average.
4. A grade of *Fail* is computed into the cumulative Grade Point Average.
5. After contracting for Pass/Fail, the student may not request or accept any grade other than a P or F.
6. This process must be completed by the end of the *eighth* week of the semester or the equivalent in summer school. Forms are available in the Office of the Registrar.

Auditing Privileges

Anyone may attend the University for the sole purpose of auditing one or more courses by first scheduling for the course, paying the regular fee, and then completing an audit application form available from the Office of the Registrar. Applications must be returned by the end of the Drop/Add Period. Full-time students have the privilege of auditing one course per semester without charge, provided they obtain approval from the course instructor and the course does not create an overload situation. If an overload results, students are assessed the per-credit rate for each credit in excess of 18. Part-time students may audit one course per semester, provided they obtain the instructor's approval, enroll in the course through the Office of the Registrar, and pay the regular course fee.

Credit is never given to auditors. After the course has commenced, the auditor status may not be changed. The grade of Audit (AU) is recorded on the student's transcript.

Credit by Examination

Forms to register for credit by examination are available from the Office of the Registrar. A fee of $25 is charged for each course. Credit by examination is a privilege subject to the following conditions:

1. Application occurs during the Drop/ Add Period.
2. The student has a cumulative GPA of at least 2.00.
3. The student demonstrates evidence of satisfactory academic background for the course.
4. The student has not already completed a more advanced course that presupposes knowledge gained in the course. For example, credit by examination cannot be given for FRE 101 after the student passed FRE 102.
5. Credits attempted or earned through the process of credit by examination are not counted in the student class load.

NOTE: Students who have taken a course but have not achieved a satisfactory grade may not apply for credit by examination for the same course.

Independent Study

Many departments offer an independent study course for students with demonstrated ability and special interests. This course is appropriate when a student has a specialized and compelling acade-

mic interest that cannot be pursued within the framework of a regular course. The independent study form is available in the Office of the Registrar.

Individualized Instruction

Individualized instruction is the teaching of a regular, listed catalog course to a single student. Individualized instruction is offered only when the University has cancelled or failed to offer a course according to schedule. The individualized instruction form is available in the Office of the Registrar.

Graduate Credit

A senior (96 credits or more) pursuing a bachelor's degree who has an overall Grade Point Average of 3.00, may, with the permission of the major adviser, course professor, department chair of the course, the dean of graduate studies and sponsored research, and the associate provost, enroll in up to six credits of graduate-level course work. The student must be at the senior level with the designated Grade Point Average at the time the course begins.

If the course is dual numbered, the undergraduate must take the undergraduate-level course and apply it towards the bachelor's degree. If the course is not dual numbered, but at the 500 level or above, the course may count either as undergraduate credit towards the bachelor's degree or as graduate credit.

If the student wishes to have the credits count towards the bachelor's degree, the student must submit a completed "Application for an Undergraduate Student To Take a Graduate Course for Undergraduate Credit." If, on the other hand, the student wishes to have the credits count towards a graduate degree, he or she must submit a completed "Application for an Undergraduate Student To Take a Graduate Course for Graduate Credit." Both forms are available in the Office of the Registrar. To receive graduate-level credit, the student also must submit a properly completed and approved Graduate School Admissions Form to the Office of Graduate Studies before completing the appropriate form.

Individual departments have the right to implement more stringent academic standards for courses within their departments. Any student not meeting University or departmental standards when the appropriate semester begins will not be permitted to enroll.

If a course is taken for undergraduate credit, no additional fees will be required. If a course is taken for graduate credit, the student must pay graduate tuition and applicable fees for that course. A student not carrying 12 hours of undergraduate credits will be charged at the appropriate hourly tuition rates for both the undergraduate and graduate credits. All other fees will be charged at the undergraduate level.

No more than six credits taken under this policy may be applied to the master's degree. Students may not elect to change between undergraduate and graduate credit after the term or semester has begun.

Undergraduate Student Attendance Policy

Each professor will determine a class attendance policy and publish it in his/her syllabus at the beginning of each semester. When a student fails to comply with the policy, the professor has the right to assign a grade consistent with his/her policy as stated in the syllabus. Absences cannot be used as the sole criterion for assigning a final grade in a course. Excused absences, in accordance with the Excused Absences Policy for University-Sanctioned Events, will not result in a penalty, provided the student follows this policy. University departments or programs may establish attendance policies to govern their sections as long as those policies fall within these guidelines.

Excused Absences Policy for University-Sanctioned Events

Undergraduate students participating in University-sanctioned events such as, but not limited to, the Marching Band, musical ensembles, theatre group, athletic events, forensics competition, etc., will be granted an excused absence(s) by the respective faculty members for class periods missed. Students will be granted the privilege of taking, at an alternative time to be determined by the professor, scheduled examinations or quizzes that will be missed. The professor will designate such times prior to the event. Professors can provide a fair alternative to taking the examination or quiz that will be missed. Students must submit original documentation on University letterhead signed by the activity director, coach, or adviser detailing the specifics of the event in advance. Specific requirements include:

1. Responsibility for meeting academic requirements rests with the student.
2. Students are expected to notify their professors as soon as they know they will be missing class due to a University-sanctioned event.
3. Students are expected to complete the work requirement for each class and turn in assignments due on days of the event prior to their due dates unless other arrangements are made with the professor.
4. If a scheduled event is postponed or canceled, the student is expected to go to class.
5. Students are not excused from classes for practice on nonevent days.

The following are specifics for the student athlete:

1. The student athlete is expected, where possible, to schedule classes on days and at hours that do not conflict with athletic schedules.
2. Athletes are not excused from classes for practice or training-room treatment on nongame days.

Exemption from Final Examinations

Students who have attained an A or B prior to the finals, have completed all other course requirements, and have the instructors' permission may waive final examinations. This privilege is subject to several reservations.

1. Any unit examinations given during the final examination period are not subject to this policy.
2. Academic departments as well as faculty may adopt a policy excluding the final examination exemption for certain courses.
3. Mutual agreement between the instructor and the student to waive the final examination should be determined during the week prior to the beginning of the examination period.

The course grade will be the A or B earned exclusive of a final examination grade.

Grade Reports

After each semester, a report of each student's semester grades is mailed to the student's home address.

Grading System

Grade	Quality Points	Percentage Equivalents	Interpretation
A+	4.33	97 or above	Excellent
A	4.00	93-96	
A–	3.67	90-92	
B+	3.33	87-89	Superior
B	3.00	83-86	
B–	2.67	80-82	
C+	2.33	77-79	Average
C	2.00	73-76	
C–	1.67	70-72	
D+	1.33	67-69	Below Average
D	1.00	63-66	
D–	0.67	60-62	
F	0.	59 or lower	Failure
NG			No Grade
W			Withdrawal
WF	0.	59 or lower	Withdrawal Failing
WP			Withdrawal Passing
Y			Administrative Withdrawal
AU			Audit

NG (No Grade): given when a student fails to complete course requirements by the end of a semester. See "Grade Changes."

W (Withdrawal): given when a student withdraws from a course between the end of the first and the end of the fifth class week of the semester or the equivalent in summer sessions (effective September 1980).

WP and WF: See "Withdrawing From a Course," page 41.

Y (Administrative Withdrawal): given under appeal when there is documentation that the student never, in fact, attended class. No refunds are associated with this grade.

Cumulative Grade Point Average

The cumulative Grade Point Average (GPA), sometimes called the cumulative index, is determined by dividing the total quality points *earned* by the total credit hours *attempted*. The following example is based on a single semester:

	Semester Hours	Grade	Quality Points for Grade		Quality Points for Course
1st subject	4	A	4	4 x 4 –	16
2nd subject	3	B	3	3 x 3 –	9
3rd subject	3	C	2	2 x 3 –	6
4th subject	3	D	1	1 x 3 –	3
5th subject	2	F	0	0 x 2 –	0
	15				34

34 divided by 15 equals a GPA of 2.27.

All grades received during a student's enrollment (except the grades of WP, P, and NG, and except when a second attempt produces a higher course grade) are included in the cumulative GPA. Grades from other colleges are excluded.

If a student repeats a course, in an effort to improve an F, D, C, or B grade, he or she must file a Grade Replacement Form in the Office of the Registrar.

Once graduated, a student's grades and GPA cannot change.

Grade Changes

A grade awarded other than NG is final. Final grades can be changed only when there is a clerical or computational error. If the student thinks there is an error, the student must report the alleged error in writing to the professor as soon as possible, but no later than the end of the fifth week of the following semester. If a grade change is warranted, the professor must submit a change of grade request to the Office of the Registrar not later than the end of the ninth week of the semester. Final grades cannot be changed after the ninth week of the semester following the alleged error.

NG (No Grade) is given when a student fails to complete course requirements by the end of a semester. If the student did not complete course requirements because of a valid reason, such as a serious illness or death in the family, the student may be granted permission by the professor to complete the requirement within the first nine weeks of the next semester.

A GRADE OF NG IS CHANGED TO AN F AUTOMATICALLY IF THE REQUIREMENTS HAVE NOT BEEN COMPLETED BY THE END OF THE NINTH WEEK OF THE FOLLOWING SEMESTER. (The instructor must file a change of an NG grade in the Office of the Registrar by the middle of the tenth week of the semester.)

A graduating senior has only 30 calendar days after the end of the term in which he or she intends to graduate to complete all degree requirements, including the removal of NG.

Grade Appeals

Scope of the Policy

The Grade Appeals Policy applies only to questions of student evaluation. Since appeals involve questions of judgment, the Grade Appeals Board will not recommend that a grade be revised in the student's favor unless there is clear evidence that the original grade was based on prejudiced or capricious judgment, or was inconsistent with official University policy. In the case where the grade was based on a charge of cheating, the Board, if it upholds the charge, will recommend a failing grade or expulsion from the University. Cheating includes but is not limited to:

1. Plagiarism, that is, copying another's work or portions thereof and/or using ideas and concepts of another and presenting them as one's own without giving proper credit to the source;
2. Submitting work that has been prepared by another person;
3. Using books or other materials without authorization while taking examinations;
4. Taking an examination for another person, or allowing another person to take an examination in one's place;
5. Copying from another's paper during an examination or allowing another person to copy from one's own and/or
6. Unauthorized access to an examination prior to administration.

Procedure

1. (a) A student must initiate an appeal in writing within 20 class days from the date of the decision or action in question. In case of an appeal of a final grade, the appeal must be filed no later than the first 20 class days of the term following the one in which the grade was received. This written appeal should be sent to the instructor who awarded the grade in question. The appeal shall be received by the student and the faculty members. They shall mutually attempt to resolve the appeal within five class days from the receipt.

   (b) If the appeal is based on an interpretation of departmental or University policy, the student's academic adviser also may be present during the review process. In such case, there shall also be a limit of five class days in which to resolve the appeal.

2. An appeal not resolved at Step 1 shall be referred in writing by the

student within five class days after the completion of Step 1 to the chairperson of the department of which the course in question is a part. If there is a departmental appeals committee, the problem shall be referred directly to it. The department chairperson or the departmental appeals committee shall normally submit a written response to the student within 10 class days following receipt of the written statement of the problem. A copy of this response also shall be provided to the instructor.

3. If no mutually satisfactory decision has been reached at Step 2, the student may submit a written appeal to the dean of the college or school in which the problem originated. Such an appeal shall be made within five class days following the receipt of the written response of the department chairperson or the departmental appeals committee. The dean shall investigate the problem as presented in the written documentation, review the recommendation and provide, in writing, a proposal for the solution of the problem within 10 class days following its referral.
4. If the problem is not mutually resolved by Step 3, the student may file an appeal with the Grade Appeals Board within five class days of the receipt of the written proposal from the dean. The request for an appeal must be submitted to the associate provost or, if appropriate, to the dean of graduate studies who will convene the Grade Appeals Board as soon as possible, but no later than 15 class days after the receipt of the written request.

Grade Appeals Board

1. Membership
   A. The associate provost (or, if appropriate, the dean of graduate studies) serves as nonvoting chairperson. If the associate provost is not available to serve, the administration will appoint a substitute mutually acceptable to the student and the Association of Pennsylvania State College and University Faculties (APSCUF).
   B. A faculty dean not involved in the appeals process. A substitute may be appointed as given in "A" above.
   C. Two faculty members. At the beginning of each academic year, the Office of the Associate Provost shall randomly select two full-time faculty from each academic department in order to constitute the pool. Two faculty members from different departments will be selected randomly from this pool for each Appeals Board.
   D. Two undergraduate students or, if appropriate, two graduate students appointed by the president of the Student Government Association (SGA).
2. Attendance
   A. The faculty member involved may be assisted by an adviser, an APSCUF representative, or the chairperson of the department in which the problem originated.
   B. The student involved may be assisted by an adviser. The adviser may be another student, an administrator, or a faculty member.
   C. Such witnesses as are called on behalf of either the faculty member or the student.
   D. Resource persons or expert witnesses called at the request of the board. In the event that the decision making involves knowledge of the discipline, the board shall be required to utilize at least one resource person from the discipline, an expert adviser(s) to aid them in their decision making.
3. Procedure
   A. Preparation for the Hearing — All parties must be informed of the complaint in writing by the chairperson of the Grade Appeals Board (hereafter referred to as "chairperson"), normally within five class days after the receipt of the complaint. Copies of documents and correspondence filed with respect to the complaint shall be provided to the interested parties through the chairperson. Thereafter, neither new evidence nor new charges shall be introduced before the board. The chairperson shall notify in writing the interested parties of the exact time and place of the hearing and shall provide existing University and/or Commonwealth policies relevant to the appeal at least five class days before the beginning of the proceedings. Throughout these proceedings, the burden of proof rests upon the person bringing the appeal.
   B. Hearing Procedure — During the hearing, both the faculty member and the student shall be accorded ample time for statements, testimony of witnesses, and presentation of documents.
   C. Decision of the Appeals Board
      1. The Grade Appeals Board shall deliberate in executive session and render a decision by majority vote within three days of the close of the hearing. The chairperson may participate in these deliberations but not vote.
      2. The chairperson shall notify, in writing, the student, the faculty member, and the department in which the course in question is located of the decision within three class days of the board's final action. The notification shall include the basis upon which the decision was reached.
4. Other
   A. A written statement of the decision and relevant materials shall be placed in the student's academic file.
   B. A written statement of the decision and relevant materials shall be placed in the faculty member's file subject to the provisions of official Commonwealth policy governing personnel files.

Notes

1. Both faculty member and student are entitled to the right of challenge for cause of any member of the department committee (if used) and the Grade Appeals Board except the chairperson. In the case of challenge at the Appeals Board level, the chairperson shall adjudicate the challenge. One challenge at each level is permitted.
2. A "class day" is defined as any day when classes are officially in session at West Chester University.
3. If the course in which the grade dispute occurred is offered under the auspices of a unit of the University

other than an academic department, the program director/ coordinator, head of that unit, and/or the department chairperson will function in Step 2 of the procedure. In Step 3, the appeal should then be made to the associate provost rather than the dean of the college/school.

4. If the professor is not on contract or in residence on the campus, he or she shall have the right to defer the procedure until his or her return. Similarly, if the procedure would normally occur during the summer and the student is not enrolled in any summer session, the procedure may be deferred until the fall semester at the student's request.

Dean's List

The names of degree-seeking students who complete 12 or more hours and achieve a semester GPA of 3.67 or better are placed on the Dean's List, which is published at the close of each semester. Nondegree students who complete a minimum of nine credits, have a GPA of 3.67, and no grade below a "B" in the semester also will be recognized on the Dean's List. Students who do not want to have their names published should notify the Office of the Registrar at the start of the semester.

Maintenance of Academic Standards: Probation and Dismissal

A student's scholastic standing at the University is indicated by his or her cumulative Grade Point Average (GPA). Three categories of academic standing have been established: good academic standing, probation, and dismissal. A student remains in good academic standing as long as he or she maintains a minimum cumulative GPA of 2.00 for all work taken at the University. Probation and dismissal are actions taken by the University when a student's GPA falls below an acceptable level at the end of a semester or a summer term.

Conditions of Probation. Probation is defined as a trial period during which a student whose cumulative average has fallen below acceptable standards must bring his or her average up to those standards or be dismissed from the University. The following rules govern the category of probation:

A. A student shall be placed on probation if he or she has attempted
   * more than nine and up to 18 semester hours of work with a cumulative GPA of less than 2.00
   * more than 18 but fewer than 48 semester hours of work with a cumulative GPA from 1.00 to less than 2.00
   * at least 48 but fewer than 64 semester hours of work with a cumulative GPA from 1.40 to less than 2.00
   * at least 64 or more semester hours of work with a cumulative GPA from 1.70 to less than 2.00

B. Probation shall commence immediately at the end of the semester in which the cumulative GPA falls into the range described. A notice of probation shall be printed on the student's transcript, and the student shall be notified by the University that he or she is in danger of dismissal. A student who receives notice of being placed on probation shall *immediately* seek advising, tutoring, and instruction in effective study habits and efficient use of time — in short, take every possible measure to improve the quality of his or her academic performance.

C. A student will be allowed to continue on probation for *no more than 30 semester hours of work* after being placed on probation. If the GPA has not reached an acceptable level by that time, the student will be dismissed from the University. A student is removed from probation when the cumulative GPA rises to 2.00 or above.

D. Those students who entered the University for the first time beginning with the 1989 fall semester and who have been placed on probation a second time will be allowed to continue on probation for no more than 15 semester hours of work after being placed on that second probation. If the GPA has not reached an acceptable level by that time, the student will be dismissed from the University. Thus, a student may be on probation no more than twice, and placement on probation for a third time will result in immediate dismissal.

NOTE: This does *not* prevent individual departments from requiring an average higher than 2.00 as a condition of acceptance or retention.

Dismissal from the University

A. A student shall be *dismissed* from the University if he or she has attempted
   * more than 18 but fewer than 48 semester hours of work with a cumulative GPA of less than 1.00.
   * at least 48 but fewer than 64 semester hours of work with a cumulative GPA of less than 1.40, whether he or she has previously been placed on probation or not.
   * at least 64 or more semester hours of work with a cumulative GPA of less than 1.70, whether he or she has previously been placed on probation or not.

NOTE: A student also shall be dismissed if he or she fails to meet the standards set under paragraph C above.

B. A student may petition for an exception to a dismissal action.

C. Nothing in this policy shall be taken to preclude the dismissal of students for violations of other University policies, in accordance with the provisions of those policies.

Readmission of Dismissed Students

A. A student dismissed from the University may not take course work at the University until he or she applies and is considered for readmission by the University. No student will be considered for readmission earlier than one full calendar year after the time of dismissal.

B. Students readmitted to the University *must* maintain a full 2.00 GPA for *each semester* of work following readmission and, after the completion of no more than 48 semester hours (or prior to graduation, whichever comes first), must obtain an overall cumulative GPA of 2.00 for all work taken at the University. A student who fails to meet this standard shall be dismissed from the University a second time and is not eligible for future readmission.

Repeating Courses

Beginning with the 1991 fall semester, the Repeat Policy is divided into two sections, i.e., a policy covering remedial courses (000-level) that do not count towards graduation, and a policy covering college-level courses.

A. Policy covering remedial courses
Students who enter the University beginning with the 1991 fall semester may have three attempts to pass each remedial course (000-level). The repeat privilege for remedial courses will not count within the five-repeat allotment for college level courses. Credits for these courses do not count towards graduation but are computed in the cumulative Grade Point Average. Students may file two grade replacement forms, which result in eliminating the grades from the first and second attempts. The third attempt, however, will be the grade of record. Students must pass the remedial basic skills courses (English and mathematics) with a C– or better before enrolling in a more advanced course in the respective discipline. Students enrolled in the basic skills remedial course(s) who do not pass with a C– or better after three attempts will be permanently dismissed from the University regardless of overall Grade Point Average. Students who fail remedial courses at West Chester University may not repeat those courses at another university or transfer in the college-level (100 or higher) course.

B. Policy covering undergraduate college-level courses

Students may repeat undergraduate college-level courses to improve a grade of F, WF, D, C, or B (not A).

Beginning with the 1985 fall semester,

1. No student may use the repeat option more than five times. Use of the option could, for example, mean repeating five DIFFERENT courses once each, or repeating each of two different courses twice (four repeats) and one additional course once.
2. A single course may not be repeated more than twice.
3. Use of the repeat option will be counted whether or not a grade replacement form is filed. (See procedures for filing form.)
4. A student may file a grade replacement form only once per course.

Students who repeat courses more often than the policy permits are in violation of the repeat policy and will not earn additional credits in such courses towards their degree; credits for courses beyond five repeats, or beyond two repeats for a single course, will be subtracted at the time of final clearance for graduation.

Undergraduate students who *take and complete* a course at West Chester may not repeat the course at another institution and have the credits *or* grade count towards a West Chester degree. (Completion of a course is implied by the assigning of a grade for that course, including a "WF" grade.)

Because all students must take and pass both ENG 120 and ENG 121 to graduate, a student who fails either of these courses after three attempts will be dismissed immediately following the third failure, regardless of GPA.

Repeat Course Procedure

The first time a student completes a course for a grade it is considered the first attempt. The second time a student completes a course for a grade it is considered the second attempt and the first repeat. The third time a student completes a course for a grade it is considered the third attempt and is the second repeat. The first time a course is repeated, only the second grade is computed into the GPA. For this to occur, students should file a Grade Replacement Form in the Office of the Registrar at the beginning of the semester in which they will complete the second attempt. However, forms must be filed prior to the time of final graduation clearance. If the college-level course is repeated a second time, both the second and third grades are computed into the GPA. Students who complete a course with a fourth attempt or more are in violation of the Repeat Policy.

Taking Courses Off Campus

West Chester University students who wish to enroll at another institution and have the credits count towards a West Chester degree must fill out and turn in a Permission to Take Courses Off Campus Form in the Office of the Registrar prior to enrolling at the other institution. Grades received in courses taken at other institutions are not calculated in the West Chester cumulative Grade Point Average; only the credits may be transferred. (See also "Transfer of Credit" for performance standards governing courses to be counted toward a West Chester degree.) Undergraduate students who *take and complete* a course at West Chester may not repeat the course at another institution and have the credits *or* grade count towards a West Chester degree. (Completion of a course is implied by the assigning of a grade for that course, including a "WF" grade.)

If there is doubt as to which West Chester course is equivalent to the course to be taken elsewhere, the student should consult with the chairperson of the West Chester department offering the course or consult the transfer credit analyst in the Office of the Registrar.

Transfer of Credit

Credit may be granted for equivalent courses completed in accredited institutions of higher education. Credit for work completed at an unaccredited institution may be granted on the recommendation of the student's major department in consultation with the school or college dean and transfer credit analyst. (See also "Admission to West Chester.")

Effective for students who entered the University after September, 1973, D grades are accepted for transfer if the credit is for equivalent courses within the framework of general requirements or free electives, provided the transferred course does not satisfy a major field requirement as well.

D grades considered for transfer for a major program requirement are treated in the same manner as the major department treats D grades earned at West Chester; that is, the student's major department may require the course to be repeated.

If the student is required to repeat a course in which a D was obtained, the course originally considered for transfer will not be accepted for any type of credit.

Likewise, if a student changes his or her major, D grades originally approved for transfer will be re-evaluated by the new major department.

IN ORDER TO RECEIVE FULL CREDIT FOR COURSES TAKEN ELSEWHERE AND FOR PROFICIENCIES DEMONSTRATED ON ADVANCED PLACEMENT OR COLLEGE LEVEL EXAMINATION PROGRAM (CLEP) EXAMINATIONS, THE TRANSFER STUDENT SHOULD HAVE THIS WORK EVALUATED PRIOR TO ENROLLING IN ANY POTENTIALLY EQUIVALENT COURSE AT WEST CHESTER.

Policy on Correspondence Courses

The University does not allow credit for courses taken through correspondence.

Advanced Placement Program

Courses taken under the Advanced Placement Program offered by the College Entrance Examination Board may be applied toward advanced placement in the University and/or toward credit requirements for graduation. The University recognizes the grade of 3.00 or above as acceptable.

Experiential Learning Credits (Life Learning Experience)

West Chester University offers three programs which assess learning acquired outside of the traditional classroom. The University evaluates and awards credits on a course basis; therefore, students must demonstrate competence in a particular course, not a general body of knowledge. Students may earn a maximum of 32 credits through any combination of these three programs.

CLEP—the College Level Examination Program is a series of standardized tests offered by the College Board in approximately 30 different subject areas. West Chester University accepts the examinations, for degree credit only, in which the score is in the 50th percentile or above. The examinations are given at the University every month but December. West Chester University does NOT accept the general examinations of CLEP. Information, including fees, test dates, available exams, etc., is available through University College.

Portfolio Development and Assessment—Students may choose to develop a portfolio as a means of demonstrating competence in a course. A portfolio consists of a brief autobiographical sketch, and extensive description of the student's learning experiences and supporting documentation such as a job description, certificates from training courses, letters of recommendation, etc. The portfolio is evaluated by an appropriate faculty member who will also usually require an interview. The charge for portfolio assessment is one-half the tuition for the course. Information describing portfolio assessment is available through University College.

Credit by Examination—The third option is Credit by Examination which is described earlier in this catalog.

Requirements for Graduation

A student is recommended for graduation upon the satisfactory completion of a minimum of 128 semester hours and upon fulfillment of all categories of the requirements for his or her degree. A minimum cumulative GPA of 2.00 (C) is required for graduation. Specific programs, in accordance with University procedures, may set other higher standards. Degree requirements are detailed under the heading of the subject field. See also "Requirements for the Baccalaureate Degree." A student must file for graduation no later than the beginning of the semester in which he or she will complete the requirements.

Any senior who does not complete all degree requirements within 30 calendar days of the end of the term in which he or she intends to graduate must pay the diploma fee again before an updated diploma will be issued. Such a student, however, does have the right to request a letter from the University confirming his or her graduation after all requirements have been satisfactorily completed.

Resident Credit Requirement

To qualify for graduation, a student must take at least 30 semester hours of credit at West Chester. Normally the student will take the last 30 semester hours at West Chester.

Required Notice of Intention to Graduate

Students intending to graduate in May or August *must* come to the Office of the Registrar and give notice of intention to graduate no later than February 1. August graduates may participate in the May commencement exercises if they file their notices of intention to graduate by February 1. Students intending to graduate in December must give such notice no later than October 1. The baccalaureate degree will not be granted unless this requirement is met.

After submitting this notice, the student will receive a cap and gown order form and a bill for the graduation fee. He or she also will specify how his or her name should be shown on the diploma and commencement program. *Unless the deadline is met, it will be impossible for the University to order a diploma, place the name on the forthcoming commencement program, or have the transcript reflect the appropriate date of graduation.* For this reason, all students are urged to review their records of progress towards graduation with their adviser and to file for graduation two semesters prior to the date of graduation.

Graduation Honors

Graduation honors are awarded as follows:

	Cumulative GPA
cum laude	3.25 - 3.49
magna cum laude	3.50 - 3.74
summa cum laude	3.75 - 4.00

The Honors List for Commencement is based on the mid-semester, nonfinal GPA. A transfer student must have completed 64 hours at West Chester University prior to that time to be so recognized. Those who do not attain honors distinctions until the end of their final semester, or those transfer students with honor distinction who do not complete 64 hours until the end of the final semester, will have recognition of their achievement on their final transcripts, where all honors distinctions are recorded.

Transcripts

Requests for official transcripts are made by writing to the Office of the Registrar, Elsie O. Bull Center. The fee is $3 for each transcript. Immediate transcripts are $5 upon request. Checks, payable to West Chester University, must accompany either request.

Directory Information — Rights and Privacy Act of 1974

West Chester University from time to time makes public certain kinds of information about students, such as the names of those who receive scholarships, who hold offices, or who are members of athletic teams. Various kinds of campus directories are published throughout the year to help members of the University community locate and communicate with each other. The commencement programs publish the names of those who have received degrees during the year.

The Family Educational Rights and Privacy Act of 1974 defines the term "directory information" to include the following categories of information: the student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, date of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The

University will limit information that is made public to categories such as these but will not necessarily publish all such information in every listing.

Undergraduate students who *do not wish* to have any or all of such directory information published without their prior consent must file notice in the Office of the Registrar. Graduate students must file notice in the Office of Graduate Studies and Sponsored Research. The student must bring a signed, dated statement specifying items not to be published to the appropriate office within the first 15 calendar days after the beginning of the fall and spring semesters.

Student Name Changes

Any student wishing to change his/her name from that currently on record must provide legal documentation supporting the change. This must be the original or a notarized photocopy of a *court-generated document*, such as a marriage license, court order, divorce decree, etc. A driver's license is not adequate. Requests for name changes received through the mail will be acknowledged by letter.

Exemption from Academic Policies

Students may file a petition which requests exemption from academic policies. Petitions are available in the school and college deans' offices and the Office of the Registrar.

The Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act of 1974, as amended, is a federal law which states (a) that a written institutional policy must be established and (b) that a statement of adopted procedures covering the privacy rights of students be made available. The law provides that the institution will maintain the confidentiality of student education records.

West Chester University accords all rights under the law to students who are in attendance at the University, and in certain instances to the parents of dependent students, as defined in Section 152 of the Internal Revenue Code of 1954. Basically, a dependent student is a student whose parents(s) provides more than half of his/her support. Generally, the University does not provide information to parents because of this act. However, exceptions are made if:

1.) the student must give the parents written consent, if the student is independent; or

2.) the parents must provide a certified copy of their most recent Federal Income Tax Form reflecting dependency status of the son/ daughter which must be on file in the Office of the Registrar

No one outside the institution shall have access to, nor will the institution disclose, any information from students' education records without the students' written consent except to personnel within the institution, to officials of other institutions in which students seek to enroll, to persons or organizations providing students financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order, a valid subpoena, and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the act.

Within the West Chester University community, only those members, individually or collectively, acting on the student's educational interest are allowed access to student education records. These members include, without limitation, personnel in the offices of the Registrar, Comptroller, Financial Aid, Admissions, and academic personnel within the limitations of their need to know.

At its discretion the institution may provide directory information in accordance with the provisions of the act to include: student name, address, telephone number, date and place of birth, major field of study, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended by the student, participation in officially recognized activities and sports, and weight and height of members of athletic teams. Students may withhold directory information by notifying the Office of the Registrar in writing within 15 calendar days after the beginning of each fall semester.

Requests for nondisclosure will be honored by the institution for only one academic year; therefore, authorization to withhold directory information must be filled annually in the Office of the Registrar.

The law provides students with the right to inspect and review information contained in their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if the decisions of the hearing panels are unacceptable. The University Registrar at West Chester University has been designated by the institution to coordinate the inspection and review procedures for student education records, which include admissions, personal, and academic. Students wishing to review their education records must make written requests to the Office of the Registrar listing the item or items of interest. Only records covered by the act will be made available within 45 days of the request. Students may have copies made of their records with certain exceptions, or a copy of the academic record for which a financial hold exists. These copies will be made at the students' expense at prevailing rates which are listed in the current catalog. Education records do not include records of instructional, administrative, and educational personnel which are the sole possession of the maker and are not accessible or revealed to any individual except a temporary substitute, records of the law enforcement unit, student health records, employment records, or alumni records. Health records, however, may be reviewed by physicians of the students' choosing.

Students may not inspect and review the following as outlined by the act: financial information submitted by their parents, confidential letters and recommendations associated with admissions, employment or job placement, or honors to which they have waived their rights of inspection and review; or education records containing information about more than one student, in which case the institution will permit access only to that part of the record which pertains to the inquiring student. The institution is not required to permit students to inspect and review confidential letters and recommendations placed in their files prior to January 1, 1975, provided those letters were collected under established policies of confidentiality and were used only for the purposes for which they were collected.

Students who believe that their education records contain information that is inaccurate or misleading, or is otherwise in violation of their privacy or other rights, may discuss their problems informally with the Office of the Registrar. If the decisions are in agreement with the students' requests, the appropriate records will be amended. If not, the students will be notified within a reasonable amount of time that the records will not be amended, and they will be informed by the Office of the Registrar of their right to a formal hearing. Student requests for a formal hearing must be made in writing to the associate provost who, within a reasonable period of time after receiving such request, will inform students of the date, place, and time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearings by one or more persons of their choice, including attorneys, at the students' expense. The hearing panels which will adjudicate such challenges will be the individuals designated by the University.

Decisions of the hearing panels will be final, will be based solely on the evidence presented at the hearing, and will consist of written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered to all parties concerned. Their education records will be corrected or amended in accordance with the decisions of the hearing panels, if the decisions are in favor of the student. If the decisions are unsatisfactory to the student, the student may place with the education record statements commenting on the information in the records, or statements setting forth any reasons for disagreeing with the decisions of the hearing panels. The statements will be placed in the education records, maintained as part of the students' records, and released whenever the records in question are disclosed.

Students who believe adjudications of their challenges were unfair or not in keeping with the provisions of the act may request, in writing, assistance from the president of the institution to aid them in filing complaints with The Family Educational Rights and Privacy Act Office (FERPA), Department of Education, Room 4074, Switzer Building, Washington D.C. 20202.

Revisions and clarifications will be published as experience with the law and the institution's policy warrants.

This policy has been adopted in accordance with the Family Educational Rights and Privacy Act, 20 U.S.C. 1232(g), and the regulations promulgated thereunder at 34 C.F.R. 99.1 *et seq.*, and that reference should be made to that statute and regulations for additional information.

Please contact the Office of the Registrar with any questions.

Structure of the University

COLLEGE OF ARTS AND SCIENCES

Jennie Skerl, *Interim Dean*

Anthropology and Sociology
Art
Biology
Chemistry
Communication Studies
English
Foreign Languages
Geology and Astronomy
History
Mathematics and Computer Science
Philosophy
Physics
Psychology
Theatre Arts

SCHOOL OF BUSINESS AND PUBLIC AFFAIRS

Christopher M. Fiorentino, *Dean*

Accounting
Criminal Justice
Economics
Geography and Planning
Management
Marketing
Political Science
Social Work

SCHOOL OF EDUCATION

Michael L. Hanes, *Dean*

Childhood Studies and Reading
Counselor, Secondary, and Professional Education
Instructional Media
Special Education

SCHOOL OF HEALTH SCIENCES

Roger W. Mustalish, *Interim Dean*

Communicative Disorders
Health
Nursing
Physical Education
Sports Medicine

SCHOOL OF MUSIC

Mary Anne Rees, *Dean*

Instrumental Music
Keyboard Music
Music Education
Music History and Literature
Music Theory and Composition
Vocal and Choral Music

ACADEMIC SERVICES DIVISION

Vivian Nix-Early, *Assistant Vice President for Academic Affairs*

Educational Services
Undeclared Major Program
Military Science

Undergraduate Programs at West Chester

Students may enroll at West Chester University in programs leading to the following degrees or certificates:

Associate of Arts (AA)
Associate of Science (AS)
Bachelor of Arts (BA)
Bachelor of Fine Arts (BFA)
Bachelor of Music (BM)
Bachelor of Science (BS)
Bachelor of Science in Education (BSED)
Bachelor of Science in Nursing (BSN)
Local Certificate (CERTIF)
Teaching Certificate (TCHG CERT)

PROGRAMS OF STUDY

Accounting BS
American Studies BA
Anthropology BA
Anthropology-Sociology BA
Applied Media Technology AS
Art BA, BFA
Athletic Training BS, CERTIF
Biology BA, BS, BSED, TCHG CERT
Biology: Cell and Molecular, Ecology, Microbiology, BS
Business Management BS
Chemistry BS, BSED, TCHG CERT
Chemistry-Biology BS
Chemistry-Biology (Pre-Medical) BS
Chemistry-Geology BS
Clinical Chemistry BS
Communication Studies BA
Communication BSED, TCHG CERT
Communicative Disorders BA
Comparative Literature BA
Computer and Information Sciences BS
Criminal Justice BS
Driver-Safety Education TCHG CERT
Early Childhood Education BSED, TCHG CERT
Earth Science BS, TCHG CERT
Earth-Space Science BSED
Economics BA, BS
Elementary Education BSED, TCHG CERT
English (see Literature) BSED, TCHG CERT
Environmental Education TCHG CERT
Ethnic Studies CERTIF
Forensic Chemistry BS
French BA, BSED, TCHG CERT
Geography BA
German BA, BSED, TCHG CERT
Health and Physical Education BS, TCHG CERT
Health and Physical Education–Physical Fitness BS
Health and Physical Education–Student Designed BS
Health Education BS, TCHG CERT
Health Sciences BS
History BA
Jazz Studies and Contemporary Media BM
Latin BA, BSED, TCHG CERT
Latin-American Studies CERTIF
Liberal Studies AA, BA, BS
Literature BA
Marketing BS
Mathematics BA, BSED, TCHG CERT
Mathematics-Computer Science BA
Music Composition BM
Music Education BS, TCHG CERT
Music History BM
Music Performance BM
Music Theory BM
Nursing BSN
Philosophy BA
Philosophy-Religious Studies BA
Physics BS, BSED, TCHG CERT
Physics-Engineering BS
Political Science-International Relations BA
Political Science-Public Administration BA
Psychology BA
Psychology: Cognitive Rehabilitation BA
Public Health BS
Public Health: Environmental BS
Public Health/Nutrition BS
Respiratory Care AS
Russian BA, BSED, TCHG CERT
Russian Studies CERTIF
Secondary Education (See individual concentration) BSED, TCHG CERT
Social Studies BSED, TCHG CERT
Social Work BA
Sociology BA
Spanish BA, BSED, TCHG CERT
Special Education BSED, TCHG CERT
Speech Correction BSED, TCHG CERT
Studio Arts BFA
Theatre Arts BA

Programs of Study and Course Offerings

Guide to the Catalog

Departments are arranged alphabetically within the college or school housing them (see list on page 50). Interdisciplinary programs are listed with the College of Arts and Sciences. Special programs that are administered by the Academic Services Division are presented last.

Students may obtain a typical sequence of courses for any program from the office specified in this catalog.

Please note that all courses, course descriptions, course sequences, and course substitutions are subject to change. Current information is available from the appropriate department chair, dean, or program coordinator.

Guide to Course Prefixes

Many program descriptions in this catalog refer to courses offered by other departments using a course abbreviation called a prefix. In addition, some course prefixes do not use the logical initials of the courses to which they refer (e.g., CLT is used to indicate instrumental music courses). To assist in locating the department or program which uses each prefix, the following guide to course prefixes is provided.

PREFIX	DEPARTMENT/PROGRAM
CB	Instrumental Music
ACC	Accounting
ACP	Instrumental Music
ACS	Instrumental Music
ACW	Instrumental Music
ADM	Administration, Leadership for Women
AEB	Instrumental Music
AEO	Instrumental Music
AER	Educational Services
AES	Instrumental Music
AJZ	Instrumental Music
AIC	Instrumental Music
AIM	Instrumental Music
ALC	Instrumental Music
AMC	Instrumental Music
AMS	American Studies
ANT	Anthropology and Sociology
ARH	Art
ART	Art
BAR	Instrumental Music
BAS	Instrumental Music
BIL	Biology
BIO	Biology
BLA	Marketing
BSN	Instrumental Music
CHE	Chemistry
CHO	Vocal/Choral Music
CLS	Comparative Literature Studies, English
CLT	Instrumental Music
COM	Communication Studies (previously SPC)
CRJ	Criminal Justice
CRL	Chemistry
CRW	English
CSC	Mathematics and Computer Science
ECE	Childhood Studies and Reading
ECO	Economics
EDA	Special Education
EDC	Counselor, Secondary, and Professional Education
EDE	Childhood Studies and Reading
EDF	Counselor, Secondary, and Professional Education
EDM	Instructional Media
EDO	Counselor, Secondary, and Professional Education
EDP	Counselor, Secondary, and Professional Education
EDR	Childhood Studies and Reading
EDS	Counselor, Secondary, and Professional Education
EDX	Counselor, Secondary, and Professional Education
EFR	Foreign Languages
EGE	Foreign Languages
ERU	Foreign Languages
ENG	English
ESP	Foreign Languages
ESL	Geology and Astronomy
ESS	Geology and Astronomy
FIN	Economics
FLM	English
FLU	Instrumental Music
FRE	Foreign Languages
FRH	Instrumental Music
GEO	Geography and Planning
GER	Foreign Languages
GRE	Foreign Languages
GTR	Instrumental Music
HAR	Keyboard Music
HBI	Political Science
HEA	Health
HEB	Foreign Languages
HIS	History
HON	Honors Program
HPE	Physical Education
HRP	Instrumental Music
IND	Geology and Astronomy
INS	Instrumental Music
ITA	Foreign Languages
JBR	Instrumental Music
JRN	English
JST	Instrumental Music
JWW	Instrumental Music
KEN	Keyboard Music
LAN	Foreign Languages
LAT	Foreign Languages
LEN	English
LIN	Foreign Languages
LIT	English
MAK	Keyboard Music
MAT	Mathematics and Computer Science
MGT	Management
MHL	Music History
MIS	Marketing
MKT	Marketing
MSI	Educational Services
MTC	Music Theory and Composition
MTE	Mathematics and Computer Science
MTL	Mathematics and Computer Science
MUE	Music Education
MWJ	Music Theory and Composition
MWP	Keyboard Music
NSG	Nursing
NSL	Nursing
OBO	Instrumental Music
ORG	Keyboard Music
PAD	Political Science
PEA	Physical Education
PED	Physical Education
PEL	Physical Education
PER	Instrumental Music
PHI	Philosophy
PHL	Physics
PHR	Physics
PHS	Physics
PHY	Physics and Pre-Engineering
PIA	Keyboard Music
POR	Foreign Languages
PSC	Political Science
PSY	Psychology
RES	Counselor, Secondary, and Professional Education
RUS	Foreign Languages
SAX	Instrumental Music
SCB	Biology (Pre-Med)
SCC	Chemistry
SCE	Geology and Astronomy
SOC	Anthropology and Sociology
SPA	Foreign Languages
SPP	Communicative Disorders
SSC	Social Studies, Ethnic Studies, Peace and Conflict Studies
STA	Mathematics and Computer Science
SWO	Social Work
TBA	Instrumental Music
THA	Theatre Arts
TPT	Instrumental Music
TRB	Instrumental Music
UNI	Educational Services
VCL	Instrumental Music
VLA	Instrumental Music
VLN	Instrumental Music
VOC	Vocal and Choral Music
VOI	Vocal and Choral Music
WCJ	Educational Services
WOS	Women's Studies

College of Arts and Sciences

Jennie Skerl, *Interim Dean*

Department of Anthropology and Sociology

Douglas McConatha, *Chairperson*

PROFESSORS: Becker, Greisman, Keith, McConatha, Shaffer, Stoller

ASSOCIATE PROFESSORS: Freeman-Witthoft, Luck, Murphy

ASSISTANT PROFESSORS: Berger, Cowen, Morales

The Department of Anthropology and Sociology offers three programs leading to the Bachelor of Arts degree and, in cooperation with the faculty of teacher education, a program leading to the Bachelor of Science in Education.

1. The B.A. in ANTHROPOLOGY focuses on human biological evolution; on the origin, development and integration of human cultures; and on the interrelationship of biological and cultural factors in the etiology of human behavior.
2. The B.A. in SOCIOLOGY focuses on understanding the processes involved in the creation, maintenance, and evolution of social structure, and on the impact of diverse structural forms on individual behavior.
3. The B.A. in ANTHROPOLOGY-SOCIOLOGY focuses on the interdisciplinary study of social anthropology/comparative sociology, drawing on offerings in both sociology and anthropology to develop an analytic understanding of the dialectic of social structure and culture.
4. The B.S. in EDUCATION in SOCIAL STUDIES is for students interested in pursuing a concentration in anthropology or sociology while earning state certification to teach secondary school social studies.

Majors in the three B.A. programs should consult the appropriate department handbook and their adviser for current requirements. Students planning to major in one of these programs are advised to take ANT 102 and SOC 200 no later than their sophomore year. Application for admission is made on forms available from the department office.

Students planning to pursue the B.S. in Education in social studies should consult during the freshman year with both their adviser in this department and their professional studies adviser in secondary education.

REQUIREMENTS COMMON TO THE B.A. PROGRAMS

1. General Requirements, see pages 35–39	51 semester hours
2. Foreign Language/Culture Requirement	0-15 semester hours
3. Limited electives chosen under advisement	18 semester hours
4. Major Requirements	60 semester hours

BACHELOR OF ARTS — ANTHROPOLOGY

1. Required Core Courses ANT 101 or 310, 103, and 495 (ANT 102 under social science core)	9 semester hours
2. Specialization Requirements Four to seven courses in anthropology	12-21 semester hours
3. Cognate Requirements LIN 230; additional courses outside of anthropology approved by the student's adviser	15 semester hours
4. Free Electives	15-24 semester hours

BACHELOR OF ARTS — SOCIOLOGY

1. Required Core Courses SOC 300, 321, 322, and 492	12 semester hours
2. Specialization Requirements Any six advanced courses in sociology	18 semester hours
3. Career Preparation Sequence Five nonsociology courses approved by the student's adviser	15 semester hours
4. Free Electives	15-24 semester hours

BACHELOR OF ARTS — ANTHROPOLOGY-SOCIOLOGY

1. Anthropology-Sociology Core Courses ANT 341 and SOC 322	6 semester hours
2. Anthropology Two topical and two area courses in ethnology, selected in consultation with the student's adviser	12 semester hours
3. Sociology One methodology and three topical (institutional or theoretical) courses, selected in consultation with the student's adviser	12 semester hours
4. Seminar ANT 490	3 semester hours
5. Cognates Four courses selected in consultation with the student's adviser	12 semester hours
6. Free Electives	15 semester hours

BACHELOR OF SCIENCE IN EDUCATION — SOCIAL STUDIES: CONCENTRATION IN ANTHROPOLOGY OR SOCIOLOGY

Students interested in teaching secondary school social studies may pursue a concentration in anthropology or sociology while earning state certification and the Bachelor of Science in Education. See the description under "Social Studies: B.S. in Education."

Minor Programs

Students may minor in any of the three following programs. A minimum of 18 semester hours is required. Elective courses are selected in consultation with the student's minor adviser. Students may take any of these minors as a concentration in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

Anthropology Minor

1. Required Courses ANT 102, either ANT 101 or 103, and one 400-level course in anthropology	9 semester hours
2. Elective Courses Three other courses in anthropology	9 semester hours

Sociology Minor

1. Required Courses SOC 200, 300, and 322	9 semester hours
2. Elective Courses Three other courses in sociology	9 semester hours

Anthropology-Sociology Minor

1. Required Courses ANT 102 and 341, and SOC 200 and 341	12 semester hours
2. Elective Courses Two other courses in either anthropology or sociology	6 semester hours

COURSE DESCRIPTIONS

ANTHROPOLOGY

Symbol: ANT

PRIMARILY FOR FRESHMEN AND SOPHOMORES

101 Introduction to Anthropology: Biological (3) Fundamentals of human biology, evolution, and the prehistoric development of culture. Offered in spring of odd-numbered years.

★ 102 Introduction to Anthropology: Cultural (3) Comparative anaylsis of culture systems. Offered in fall, spring, and summer.

★ 103 Introduction to Anthropology: Archaeology (3) Interpretation of culture through analysis of archaeological remains. Offered in spring of even-numbered years, and in summer.

113 Archaeological Field Techniques (3) Implementation of archaeological principles and theory in laboratory and field studies. PREREQ or CONCURRENT: ANT 103. Offered in summer.

120 Cultures of Ethnic Groups in America (3) Survey of the cultural history and traditions of ethnic groups in America. Offered in fall of odd-numbered years.

FOR SOPHOMORES AND UPPERCLASSMEN

202 World Ethnology (3) Survey of the social organization, belief systems, and cultures of selected peoples. PREREQ: ANT 102 or permission of instructor. Offered in spring of even-numbered years.

260 Artifacts and Culture (3) (See also HIS 353.) PREREQ: ANT 102.

◆ 280 Practicum in Museum Techniques I (3) Exploration of techniques of cataloging, conserving objects, and of designing and setting up exhibits. Involvement in actual museum work. PREREQ: ANT 102 or permission of instructor. Offered in fall of odd-numbered years.

FOR UPPERCLASSMEN

A. BIOLOGICAL ANTHROPOLOGY

310 Human Paleontology (3) Evolutionary thought; origin and antiquity of the primates; fossil man and living races. (Some background in biology recommended.)

B. ETHNOLOGY: AREA COURSES

320 American Indian (3) Ethnology of North America. PREREQ: ANT 102.

321 American Indian Today (3) Native Americans in contemporary Anglo-America. PREREQ: ANT 102 or permission of instructor. Offered in spring of odd-numbered years, and in summer.

■ 322 Ethnology of Central America (3) Survey of the modern cultures of Central America: relationships to ancient peoples; the process of modernization in this area. PREREQ: ANT 102.

326 Cultures and Peoples of Sub-Saharan Africa (3) Examination of the cultures and societies of Black Africa. PREREQ: ANT 102.

327 Cultures and Peoples of India (3) (See also HIS 302.) PREREQ: ANT 102.

◆ 329 Problems in Ethnology (3) Survey of the ethnographic literature pertaining to specific geographic regions. Area of focus to be announced in advance. PREREQ: ANT 102.

C. ETHNOLOGY: TOPICAL COURSES

340 Folklore in Society (3) Survey of basic American folklore genres. Emphasis on folklore as process, tradition, and as an element of culture.

341 Social Organization (3) Study of social groups, their structure, and functioning. PREREQ: ANT 102.

342 Political Anthropology (3) Analysis of tribal and peasant political systems. PREREQ: ANT 102.

343 Economic Anthropology (3) Analysis of tribal and peasant economic systems. PREREQ: ANT 102.

344 Magic, Religion, and Witchcraft (3) An analysis of supernaturalistic ideology and ritual in both tribal and civil society. PREREQ: ANT 102.

345 Culture and Personality (3) Study of the relationship between culture systems and personality. PREREQ: ANT 102.

346 Culture Change (3) Empirical and theoretical study of culture change. PREREQ: ANT 102.

350 Primitive Art (3) (See also ARH 350). PREREQ: ANT 102.

D. ARCHAEOLOGY

360 Historical Archaeology (3) Historical research through archaeology. Chester County is emphasized through local research projects. PREREQ or CONCURRENT: ANT 103.

■ 362 Archaeology of Central America (3) The archaeological record of Central America, covering the significant features of each culture area from modern Mexico to Panama. PREREQ: ANT 103.

ADVANCED AND SENIOR COURSES

380 Language and Culture (3) (also LIN 380) See LIN 380.

381 Sociolinguistics (3) (also LIN 381) The study of the use of language in society and in educational settings; social dialects; language policy; Black English. PREREQ: ANT 102.

383 Structuralism: From Chaos to Order in the World of Ideas (3) This course is a general survey of structuralist theory as it relates to linguistics, anthropology, psychology, and literature. The goal of the course is to demonstrate how structuralism is a theoretical orientation in the social sciences and the humanities that attempts to transform the chaos of appearances into order of reality in the world of ideas.

◆ 405 Topical Seminar in Anthropology (3) Selected topics in the subdisciplines of anthropology. Topics announced in advance. Juniors and seniors only.

◆ 410 Independent Studies in Anthropology (1–3) Special research projects, reports, and readings in anthropology. Juniors and seniors only. PREREQ: Permission of department chairperson.

459 History of Ethnological Theory (3) Development of ethnological theory with emphasis on the nature of explanation in ethnology. PREREQ: Six hours in ethnology and junior or senior standing.

490 Seminar in Social Anthropology (3) History and theory of social anthropology. PREREQ: Six hours in ethnology and six hours in sociology. Seniors only.

495 Senior Seminar in Anthropology (3) Discussion and supervised research designed to integrate conceptual and methodological skills. The research paper for the seminar must be acceptable as a required departmental senior research paper. Senior anthropology majors only.

SOCIOLOGY

Symbol: SOC

PRIMARILY FOR FRESHMEN AND SOPHOMORES

★ 200 Introduction to Sociology (3) Fundamentals of the sociological perspective on human behavior. Offered in fall, spring, and summer.

★ 240 Sociology of the Family (3) Comparative, historical, and cross-cultural analysis of the family institution. Offered in fall, spring, and summer.

PRIMARILY FOR SOCIOLOGY MAJORS AND OTHER UPPERCLASSMEN

300 Sociological Theory (3) Historical development of the sociological perspective on human behavior, with emphasis on the perennial issues in sociological explanation. PREREQ: SOC 200.

302 Sociology of Everyday Life (3) How people interact in everyday settings, examined from the dramaturgical perspectives of Goffman, Douglas, Burke, and others. PREREQ: SOC 200.

321 Statistics in Sociological Research (3) The application of statistical methods to sociological hypothesis testing. PREREQ: SOC 200.

322 Methods of Sociological Research (3) The logic of social research. Fundamentals of research design, data collection and reduction, and nonstatistical analysis. PREREQ: SOC 200.

333 Self and Society (3) A symbolic interactionist perspective on social psychology which focuses on the self in social interaction. PREREQ: SOC 200.

335 Racial and Cultural Minorities (3) Analysis of the implications of racial differences, the factors affecting prejudice and discrimination, and structural aspects of group conflicts. PREREQ: SOC 200.

341 Social Inequality (3) Analysis of inequalities in wealth, power, and prestige in contemporary societies. PREREQ: SOC 200.

342 Urban Sociology (3) A descriptive study of the form and development of the urban community with respect to demographic structure, spatial and temporal patterns, and functional organization. PREREQ: SOC 200.

343 Sociology of Organizations (3) Analysis of large-scale, formal organizations with emphasis on bureaucracy as the dominant form of social organization in the West. PREREQ: SOC 200.

344 Sociology of Religion (3) Theoretical analysis of social functions of religion, the history and internal structure of religious institutions, and their relationship to other institutions. PREREQ: SOC 200.

345 Sociology of Education (3) Sociological dimensions of educational institutions. PREREQ: SOC 200.

346 Sociology of Gender (3) Analysis and evaluation of sociological research on sex roles. PREREQ: SOC 200.

#349 Perspectives on Mental Illness (3) An interdisciplinary examination of mental disorders— their definition, cause, and treatment. PREREQ: SOC 200.

350 Sociology of Mental Illness (3) A sociological perspective on mental disorders. PREREQ: SOC 200.

351 Deviance (3) Causes and consequences of the construction and violation of social norms. PREREQ: SOC 200.

352 Criminology (3) Sociological analysis of the definition, distribution, and causes of crime, and of social response to it. PREREQ: SOC 200.

353 Juvenile Delinquency (3) Theories of delinquency; evaluation of programs for its prevention and control. PREREQ: SOC 200.

★ Approved distributive requirement course
◆ This course may be taken again for credit.
■ Culture Cluster
Approved interdisciplinary course.

360 Sociology of Culture (3) Analysis of the major social movements that have shaped the character and future of modern man. PREREQ: SOC 200.
361 Sociology of Medicine (3) A sociological perspective on health, illness, and medical care. PREREQ: SOC 200.
362 Sexuality in Society (3) The social dimensions of human sexuality. PREREQ: SOC 200.
364 Sociology of Aging (3) An examination of the problems, adaptations, and contributions of the aging population. PREREQ: SOC 200.
369 Social Movements (3) An introduction to the study of social movements, both historical and contemporary. PREREQ: SOC 200.
370 Social Problems (3) Analysis of current social disorders: urban unrest, racial tension, poverty, addictions, crime, and mental illness. PREREQ: SOC 200.
371 Applied Social Change (3) Strategy and tactics of planning and guiding change in small and large-scale social systems. PREREQ: SOC 200.
376 Sociology of War and Peace (3) Exploration of the relationship between social structure and war. PREREQ: SOC 200.
377 Clinical Sociology (3) Analysis and evaluation of therapeutic applications of sociology in group and individual settings. PREREQ: SOC 200.
401 Social Change (3) Critique of the leading models of social order and change; analysis of major transformation in Western civilization. PREREQ: SOC 200.
402 Career Internship in Sociology (6) Field experience in agencies involved in social change. PREREQ: SOC 371, or permission of the instructor.
410 Issues in Sociological Thought (3) Analysis of several of the key philosophical issues underlying sociological thought. PREREQ: SOC 300, or permission of the instructor.
◆ 490 Independent Studies in Sociology (1–3) Individual research projects, reports, and/or readings. Seniors only. PREREQ: Permission of department chairperson.
◆ 491 Topical Seminar in Sociology (3) Special topics in theory or methodology. Topics announced in advance. Admission by permission of instructor. Juniors and seniors only.
492 Senior Seminar in Sociology (3) Preparation of senior research paper. Senior sociology majors only.

◆ This course may be taken again for credit.

Department of Art

Linwood J. White, *Chairperson*

PROFESSORS: Sermas, Weidner

ASSOCIATE PROFESSORS: Lasuchin, Simmendinger, White

ASSISTANT PROFESSORS: Baker, Blake, Hollon, Schiff, Stieber, Usher

The undergraduate programs offered by the Department of Art give students the opportunity to achieve competence in studio art, theory, and the history of art, taking into consideration both personal and vocational needs. Each student's advising reflects an effort to relate the general requirements to art subjects.

In addition to the formal programs listed below, alternative courses of study may be planned in conjunction with other departments. Students are encouraged to make connections between art and other subjects where appropriate to achieve vocational and personal advancement after consultation with the student's adviser.

BACHELOR OF ARTS — ART

1. General Requirements, see pages 35–39 — 51 semester hours
2. Language Requirement (See special note below.) — 0-15 semester hours
3. Art Department Program Requirements (select one track)
   A. Studio Art I sequence (prepares student for graduate study and/or personal/vocational competence)
      (1) Studio Foundation (ART 106, 111, 112, 206, 220, and 221) — 18 semester hours
      (2) Art History, under advisement — 12 semester hours
      (3) Other Studio (Elect from studio offerings.) — 36 semester hours
      (4) Senior show required
      TOTAL — 66 semester hours
   B. Studio Art II sequence (provides a basic concentration with the option of a second, preprofessional concentration)
      (1) Studio Foundation (ART 106, 111, and 220) — 9 semester hours
      (2) Art History, under advisement — 12 semester hours
      (3) Other Studio (Elect from studio offerings. See special note below.) — 15 semester hours
      (4) Preprofessional concentration–courses to be selected from another discipline (elementary education, special education, business, foreign area studies, or others under advisement) — 27 semester hours
      (5) Senior show required
      TOTAL — 63 semester hours

NOTE: The foreign language requirement for Studio I is two semesters with three foreign area study courses. For Studio II and Art History, the requirement is to meet the level of Intermediate II, 202.

Studio majors are advised to consider concentration emphasis in general categories of two-dimensional, three-dimensional, or intermedia, or, if the subject area permits, a more specialized concentration in single or limited media.

BACHELOR OF FINE ARTS — STUDIO ARTS

The Bachelor of Fine Arts is regarded as the initial professional degree in art by the National Association of Schools of Art. Its primary emphasis is on the development of skills, concepts, and sensitivities important to the professional artist. Concentration in a major professional area begins only with satisfactory completion of the foundation requirements and the approval of the faculty adviser.

1. General Requirement, see pages 35–39 — 51 semester hours
2. Art Department Program Requirements*
   A. Foundation Requirements
      (1) Studio Art (ART 106, 111, 112, 206, 211, 216, 217, 220, 221, 222, and 113 or one craft course) — 30 semester hours
      (2) Art History (ARH 103 and 104 and two courses under advisement) — 12 semester hours
   B. Professional Specializations — 24 semester hours
      Professional specialization begins in the junior year when the student selects and has been accepted in one of the following areas:
      (1) Drawing and Painting (ART 226, 227, 245, 306, 307, 316, 317, and 320)
      (2) Graphic Design (ART 211, 212, 310, 311, 312, 490, 491, and 499)
      (3) Sculpture and Crafts (a selection of eight courses from ART 231, 232, 266, 321, 322, 325, 331, 332, 335, 347, 348, and 409)
   C. Art Electives (to be selected under advisement) — 12 semester hours
   TOTAL — 78 semester hours

*Student must maintain a grade of C in all major subjects.

Minor in Studio Art

1. Required Courses — 9 semester hours
   ART 106 (Beginning Drawing), ART 111 (Basic Design, 2-D), and ART 220 (Basic Design, 3-D)
2. Minor Specialization — 9 semester hours
   The student, under advisement, may select a minor specialization so that the emphasis is on one of these groups: drawing and painting, graphic design, printmaking, sculpture, or crafts.

TOTAL 18 semester hours

Minor in Art History

This program provides alternative tracks to satisfy a variety of emphases to which art history may be applied. These include both vocational and liberal arts interests, which range from a highly structured sequence to a self-designed sequence.

A. *Art History Survey* — 18 semester hours
Structured sequence of courses designed to provide an in-depth comprehensive core of Western art development. Recommended as an important cultural component to the study of history, literature, performing arts, anthropology, sociology, and psychology. (The 18 semester hours include ARH 382, 383, 384, 385, 386, and either 350 or 381.)

B. *Art History and Its Interfaces* — 18 semester hours
According to interest or possible vocational application, this program provides an opportunity to explore either the various historical periods/styles of art or the interfaces of art history with studio art, American studies, and other cognate areas.

1. Student must complete the required courses — 6 semester hours
   ARH 103 and 104
2. Student must also take two upper-level art history courses — 6 semester hours
3. Student must take, under advisement — 6 semester hours
   a. Any two studio courses
   b. Any two American studies courses
   c. Any two other art history courses
   d. Any two cognate courses from other disciplines
   e. Any combination of the above

Either of these minors may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

COURSE DESCRIPTIONS

ART

Symbol: ART

105 Art Workshop (3) An art workshop for nonart majors. Exploration of art materials and techniques.

106 Beginning Drawing (3) Drawing from direct observation and an introduction to ideas of perception and interpretation. Use of a variety of media.

111 Basic Design (2-Dimensional Design) (3) Developing a visual vocabulary by experimenting with shape, space, light, color, and texture in a variety of media.

112 Color and Design (2-Dimensional Design) (3) Extensive study of color theory and its application to a variety of fine and industrial arts projects.

113 Computer Art I (3) Introduction to computer art is designed to provide students of graphics and fine arts with the skills necessary to utilize the computer as a graphics tool, enabling students to incorporate computer art technology into their work.

206 Intermediate Drawing (3) Work in a variety of media and methods designed to develop "aggressive seeing." Emphasis on the exploration of line as boundary to describe form and space, as gesture, as calligraphy, and for expressive qualities as a tool for working in other media. PREREQ: ART 106.

210 Typography I (3) An introduction to the use of type as a basic element of graphic communication; the use of different type faces to communicate visually desired effects, typeform, type indication, type spacing, comp lettering, and basic design with type for layouts and comprehensives. Offered in fall.

211 Graphic Design I (3) The exploration of various aspects of graphic communication through the use of typography, layout, and general graphic techniques. The development of creative, original, and conceptual ideas for solving communications problems utilizing professional studio practices and procedures. Mechanical, paste-up preparation, and other methods of reproduction will be covered. Use of the computer is integrated into a variety of course assignments. Fall offering. COREQ: ART 210; PREREQ: ART 111, 113, or permission of the instructor.

212 Graphic Design II (3) The continuation of ART 211 with an emphasis on typographic problem solving. The further study of graphic design concepts and design principles used in solving different types of design problems within a given format. Use of the computer as an essential design tool is integrated into a variety of course assignments. Spring offering. PREREQ: ART 211, or permission of the instructor.

213 Computer Art II (3) An advanced study of the computer as a design tool. The computer will be used to incorporate typography and graphic design solutions utilizing page layout software.

216 Beginning Painting (3) An introduction to the basic materials and techniques of the painter with emphasis on color.

217 Intermediate Painting (3) The course seeks to provide a workshop atmosphere in which the student is given the opportunity to explore the potential of the painting media. Use of standard materials of paint, brushes, and canvas is required.

220 Fundamentals of 3-Dimensional Design (3) An introduction to the theories, processes, and elements of perception and visual design in a three-dimensional situation. Problems will be geared to problem solving rather than object making.

221 Advanced 3-Dimensional Design (3) Solving problems of relating visual elements to volumetric forms in space by experimenting with various materials.

222 Beginning Sculpture (3) An introduction to the basic fundamentals of sculpture, including concepts of design, knowledge of tools and techniques, and materials and processes. Project assignments to be rendered in clay, plaster, wood, and stone.

226 Water Color I (3) An introduction to the basic tools and techniques of the water-color painter. Emphasis upon transparent water color.

227 Water Color II (3) Advanced problems in water color, gouache, tempera, and mixed media

231 Ceramics I: Basic Techniques (3) Introduction to the basic techniques of ceramics. Hand and wheel methods of construction; knowledge of clay bodies, firing, and glazing.

232 Ceramics II: Intermediate Techniques (3) Fundamental methods of creating clay forms on the wheel. Experimentation with clay bodies, glazes, and kiln operation. Design is stressed.

241 Printmaking: Introduction of Relief Printmaking (3) An introduction to the medium of printmaking: linoleum cuts, woodcuts, and colorgraphs.

242 Printmaking: Introduction to Silk-Screen Printmaking (3) An exploration of the basic techniques of silk-screen printing. Emphasis on color and design.

243 Printmaking: Intermediate Relief Printmaking (3) Continuation of ART 241, emphasizing expressive possible techniques and their combination with other print media. PREREQ: ART 241, or permission of instructor.

244 Printmaking: Intermediate Silk-Screen Printmaking (3) Continuation of ART 242, emphasizing expressive possibilities of various silk-screen techniques and their combination with other print media. PREREQ: ART 242, or permission of instructor.

245 Architectural Drawing (3) Studio experiences in layout; preparation of plans and elevations, presentations (renderings), and architectural lettering. Use of mechanical drawing tools to help students express steps that occur from design to realization of a structure.

251 Art in the Elementary School (3) Workshop and seminar providing experience with a wide variety of media appropriate for use with children. Investigation into the philosophy and psychology of children's art

■ **263 Art as Therapy (3)** Exploration of the potential of art activities as therapy in work with physically or emotionally handicapped individuals in either educational or therapeutic milieu.

266 Introduction to Crafts (3) An introduction to varied materials with an emphasis on craft and design as a form of expression. Applicable to teaching and recreation use. Media to include clay, fibers, glass, and metals.

306 Drawing III: Life Drawing (3) An exploration of the abstract dynamics of figure drawing with particular application of anatomical structure to expressive design. PREREQ: ART 106 and 206.

■ Culture Cluster

307 Drawing IV (3-6) Individualized instruction in increasingly complex formal and expressive problems in drawing.
310 Graphic Design III (3) The exploration of developing and designing logotype symbols for use in corporate and public agencies and their applications to a variety of print materials. The use of the computer as an essential design tool is integrated into course assignments. Fall offering. PREREQ: ART 212 or permission of the instructor.
311 Graphic Design: Independent Project (3) Individualized instruction in design problems at an advanced level.
312 Graphic Design IV (3) A study of advanced concepts and design principles with an emphasis on creative solutions to problems in three-dimensional package design. The use of the computer as an essential design tool is integrated into course assignments. Spring offering. PREREQ: ART 311 or permission of the instructor.
316 Advanced Painting (3) Emphasis on advanced problems in painting in a variety of techniques. Individual expression is encouraged.
317 Painting: Studio Problems (3) Concentration on individual work and professional competence. Group critiques and discussions.
318 Painting from Landscape: Independent Project (3) Individualized landscape painting course requiring the student to paint on location in the Delaware Valley.
319 Painting From Masters: Independent Project (3) Introduces the student artist to techniques and styles by painting from master works.
320 Painting: Independent Projects (3) The development of a personal style is explored through a theme and its variation. Discipline and self-criticism are realized through a series of critiques and evaluations.
321 Intermediate Sculpture (3) More advanced problems in sculpture with emphasis on individual exploration of form, structure, and process. Independent project to be rendered in choice of materials, including clay, plaster, wood, and stone.
322 Advanced Sculpture (3) Continued exploration and development of individual form and process awareness through involvement with modeling, casting, fabrication, and assemblages. In addition to clay, wood, stone, and plaster, metals and plastics will be utilized.
323 Abstract Painting (3) A studio exploration of the fundamental principles of abstract painting.
325 Sculpture: Independent Projects (3) Individualized instruction in advanced sculpture. Preparation for senior show.
331 Ceramics III: Advanced Techniques (3) An advanced course to develop craftsmanship and to explore clay as a means of individual expression.
332 Ceramics: Studio Problems (3) Work at an advanced level in specialized ceramic techniques.
335 Ceramics: Independent Projects (3) Individualized instruction as well as research and study in ceramic design.
341 Printmaking: Introduction to Intaglio Printmaking (3) Intaglio techniques, etching, dry point, acquatint, and engraving.
342 Printmaking: Introduction to Lithography (3) Fundamentals of stone and plate lithography.
343 Printmaking: Intermediate Etching (3) Continuation of 341 with emphasis on expressive qualities of the medium and its possible combination with other print media. PREREQ: ART 341, or permission of instructor.
344 Printmaking: Intermediate Lithography (3) Continuation of ART 342 with emphasis on expressive qualities of the medium and its possible combination with other print media. PREREQ: ART 342, or permission of instructor.
345 Printmaking: Independent Projects (3) In-depth, individualized instruction in a selected printmaking medium.
347 Crafts: Weaving I (3) Basic techniques of weaving are explored with emphasis on fabric design and craftsmanship.
348 Crafts: Weaving II (3) Provides an opportunity for the weaver to further explore and develop skills as a designer. Emphasis is placed on the interrelationship between functional materials and design processes.
349 Crafts: Weaving III (3) Resolving advanced weaving problems in individual projects. Harnessing the student's creative nature for practical application.
359 Resources in Art Education (3) The use of cultural and community resources in the schools with an emphasis on the teaching of art appreciation.
◆ 409 Weaving: Independent Projects (3) Individualized instruction and project assignments.
410 Independent Study (3) The opportunity for a student to work on an individual studio problem. Only to be taken under advisement and according to departmental policies.
450 Art-Graphic Design Internship (3) Integration of classroom study and lab work with specific planned periods of learning through job experience. The course is based on an individualized, student-oriented, learning contract.
◆ 455 Introduction to Multimedia (3) A workshop for students with background in the studio arts. To be taken under advisement.
490 Graphic Design V (3) The further study of solving advanced visual communication problems through the development of skills in research, design, and the preparation of comprehensives for client presentations. The use of the computer as an essential design tool is integrated into course assignments. Fall offering. PREREQ: ART 312, or permission of instructor.
491 Graphic Design VI (3) The continuation of advanced visual communication problem solving outlined in ART 490 with an emphasis on finished comprehensives for the portfolio. The use of the computer as an essential design tool is integrated into course assignments. Spring offering. COREQ: ART 499. PREREQ: ART 490, or permission of the instructor.
499 Graphic Design VII: Portfolio (3) Study under the guidance of the instructor to prepare individual portfolios for professional presentation for employment or continuation of studies on the graduate level. Spring offering. COREQ: ART 491. PREREQ: ART 490, or permission of the instructor.

ART HISTORY

Symbol: ARH

101 Learning to Look: Fine Arts, Art (3) An introduction to painting, sculpture, architecture, and the decorative arts with emphasis on understanding the visual arts as universal human expression.
102 Survey of Art History (3) A general introduction to the history of western art from the earliest cave paintings to the 20th century.
103 Art History I: Prehistory Through the Medieval (3) Survey of significant art and architectural monuments from prehistory through the Middle Ages. Fall offering.
104 Art History II: Renaissance Through Modern (3) Continuation of ART 103. The Renaissance through the 20th century. Spring offering.
350 "Primitive" Art (also ANT 350) (3) Analysis of primitive art as determined through ritual and myth. Focus includes ethnographic parallels to prehistory and the concept of primitivism in the West.
360 Function of the Museum in Art (3) Role and function of the museum as an educational and cultural institution. Main focus on field trips to local museums in Chester and Delaware Counties and the Wilmington, Del., area.
361 Museum Practice (3) Field experience in a particular museum facility in the West Chester, Wilmington, or Philadelphia area. PREREQ: ARH 360.
381 Near Eastern Art: Ancient Antiquity (3) The art and architecture of Ancient Egypt, Mesopotamia, Assyria, and Babylonia from 3000-500 B.C.
■ 382 Art of Classical Antiquity (3) The art and architecture of the Greeks, Etruscans, and Romans.
■ 383 Art of Middle Ages (3) The art and architecture of the European medieval world and their development from Early Christian and Romanesque art into the full flowering of the Gothic period.
■ 384 Art of Renaissance-Baroque (3) Study of the art forms of the 15th through 17th centuries in Europe as they affected social and religious cross currents and the rise of the role of the artist in society.
■ 385 The Romantic Rebellion (3) From David to Rodin: the rise and development of the Romantic style and its struggle with orthodox Classicism.
386 Modern Art Seminar (3) Analysis of major styles of 20th-century art to mid-century, including Picasso.
387 Modern Masters (3) An independent research project on a major 20th-century visual artist.
388 Late Modern Art (3) The study of art beyond 1945, including the mainstreams of art to the present time.
◆ 400 Art Seminar (3) Special topics to be announced for studio and art history. Offered periodically as appropriate. PREREQ: Permission of instructor.
■ 405 Russian Art (3) A history of the art and architecture of Russia from Medieval beginnings through social realism to socialist realism.
408 French Painting: Pucelle to Picasso (3) Survey of French painting and related arts from the 14th century through World War I. Emphasis on France as a cultural center and on the relationship of French history, politics, and social change to developments in French painting.
413 American Art (3) A survey of American paintings and sculpture from Colonial times to the present.
414 Research and Methodology in Art (3) Introduction to basic research methods and the use of reference material relevant to the study of art history.
415 Art History: Independent Study (3) Opportunity for the student to pursue a particular field of interest.

◆ This course may be taken again for credit.
■ Culture Cluster

416 American Architecture: Colonial and Early Republic (3) An introduction to the heritage of our early American architecture. These buildings reveal tangible evidence of the life of the early colonial period and of the republic. The influence of the traditional, coupled with modifications because of climate, materials, and labor, reflect both provincialism and independence.
417 Modern American Architecture (3) Study of architectural forms and styles in America since the early 19th century, including a thorough analysis and consequent appreciation and understanding of the social, stylistic, and technological sources for our 19th- and 20th-century built environment.
419 Women in Art: Madonna or Model? (3) Traces the position of women artists in society and its effects on their work. What role have women played as the subject of painting through the ages? What are women artists creating today?
420 European Architecture (3) Survey of European architecture from the Norman Conquest to the 20th century.
421 Modern Architecture (3) Traces the technological sources of modern architecture from its roots in the 19th century to the late 20th century. Includes such influences as the Chicago School, the late Californians, and the Bauhaus, leading to new concepts of space, decoration, and use of materials.
■ **485 Classical Archaeology (3)** A study of Greek, Etruscan, and Roman archaeology. Theories of archaeology are given practical application in the field. The discovery, preservation, and analysis of finds from the classical world are studied.

■ Culture Cluster

Department of Biology
(See also Pre-Medical Program)

Martha Potvin, *Chairperson*
Georgann Cullen, *Assistant Chairperson*

PROFESSORS: Eleuterio, Fairchild, Fish, Romig, Waber, Woodruff

ASSOCIATE PROFESSORS: Beneski, Bernhardt, Broitman, Cullen, Mbuy, Potvin, Triano

ASSISTANT PROFESSORS: Began, Greenamyer, Knabb, Slusher, Tiebout, Vreeland

ADJUNCT PROFESSORS: Bentley, Ford, Gotkin, McClean, White, Woods

The major in biology centers on a core of courses that emphasize broad unifying principles. Available electives provide enriching experiences in many areas of biology.

The Department of Biology offers six undergraduate degree programs:

1. The B.A. in BIOLOGY provides the liberal education and the special preparation required for careers in university teaching, government service, independent and industrial research, science-related sales and public relations, and other areas of business. This program also prepares students for admission to graduate and professional schools. The possibility of 31 semester hours of free electives enables the student to obtain a minor in another area of interest.
2. The B.S. in BIOLOGY can be individually tailored to provide the skills that students need to achieve their career goals. This program also provides the basic preparation needed for entry into graduate or professional schools.

   In addition, this degree offers a unique opportunity for biology majors to enter the field of medical technology. A medical technologist is educated to perform, verify, and interpret a wide variety of laboratory analyses in hematology, immunology, and microbiology. They often supervise medical technicians, and because they have a B.S., they can often advance to positions in management, research, and education.

   Under special advisement, students complete all of the necessary general education and departmental requirements of the B.S. in biology program in three years. The fourth year is spent in a medical technologist internship program at one of several affiliated hospitals. To qualify for the internship, a student must have an overall GPA of 2.75, a science GPA of 2.50, and approval of the Department of Biology and the affiliated hospital. Students completing the internship graduate with a B.S. and the preparation to take the national Medical Technologist Certification Exam. Affiliated hospitals include Chester County Hospital and Medical College Hospital. It also may be possible to complete the internship at a nonaffiliated hospital. Students are encouraged to consult the medical technology adviser at regular intervals.
3. The B.S. in CELL and MOLECULAR BIOLOGY offers the student a strong background in both biology and chemistry. Emphasis on lab-oriented courses prepares the student to pursue a career in laboratory research in cell and molecular biology at industrial, medical, academic, and government facilities. This program also prepares the student for admission to graduate and professional schools.
4. The B.S. in BIOLOGY—MICROBIOLOGY prepares students for careers in research laboratories, industrial and academic research, and government service in the areas of bacteriology, immunology, virology, mycology, microbial ecology, and parasitology. The program provides extensive laboratory experience with the techniques that are most useful and important to modern microbiological science. This program also provides the basic preparation needed for entry into graduate or professional schools.
5. The B.S. in BIOLOGY—ECOLOGY provides an opportunity for interested students to obtain a strong background in field biology. The required core curriculum and concentration electives provide opportunities for later careers as biologists in state and federal environmental agencies, industry, environmental consulting firms, and similar organizations. Internships are strongly recommended as part of the program. Course work emphasizes skills obtained in biology, chemistry, and mathematics. Additional course work from other departments may be recommended to fulfill particular career objectives.
6. The B.S. in EDUCATION—BIOLOGY is a program designed to prepare the student for a career in teaching in secondary schools. Professional certification in biology is awarded to the student who completes the program satisfactorily. Students are strongly advised to seek certification in a related area to enhance their employment potential. Such related areas include general science, health, education, athletic training, and environmental education.

REQUIREMENTS COMMON TO THE BACCALAUREATE PROGRAMS

1. General Requirements, see pages 35–39	51 semester hours
2. Biology Requirements* BIO 110, 220, 230, and 490	10 semester hours
3. Other Science Requirements CHE 103-104, 231-232, CRL 103-104, 232, and PHY 130-140	27 semester hours
4. Mathematics Requirements MAT 121, one semester of calculus, and one semester of computer science	10 semester hours

B.A. IN BIOLOGY

1. Required Biology Courses* BIO 110, 215, 217, 220, 230, 270, and 490	19 semester hours
2. Biology Electives	12 semester hours

Selected under advisement
3. Foreign Language Requirement — up to 12 semester hours

B.S. IN BIOLOGY

1. Required Biology Courses* — 19 semester hours
   BIO 110, 215, 217, 220, 230, 270, and 490
2. Biology Electives — 24 semester hours
   Selected under advisement

B.S. IN BIOLOGY—CELL AND MOLECULAR

1. Required Chemistry Courses — 8-9 semester hours
   CHE 345, 471, 491**, and CRL 471
2. Required Biology Courses* — 24-25 semester hours
   BIO 110, 214, 215 or 217, 220, 230, 421, 466 or 468, and 490**
3. Biology or Chemistry Electives — 13-15 semester hours
   Selected from courses at or above the 300 level

B.S. IN BIOLOGY—MICROBIOLOGY

1. Required Biology Courses* — 34 semester hours
   BIO 110, 214, 215 or 217, 220, 230, 314, 421, 454 or 452, 456, 464, 465, and 490
2. Biology Electives — 10-13 semester hours
   Selected under advisement

B.S. IN BIOLOGY—ECOLOGY

1. Required Biology Courses* — 25 semester hours
   BIO 110, 215, 217, 220, 230, 270, 411, 470, and 490
2. Biology Electives — 12 semester hours
   Selected under advisement from BIO 275, 277, 372, 377, 471, 475, 476, and 485
3. Ecologically relevant courses selected under advisement — 6 semester hours

B.S. IN EDUCATION—BIOLOGY

1. Required Biology Courses* — 20 semester hours
   BIO 110, 150, 215, 217, 220, 230, 270, and 490
2. Biology Electives — 11 semester hours
   Selected under advisement
3. Required Education Courses — 30 semester hours

MEDICAL TECHNOLOGY OPTION

1. Required Biology Courses* — 27 semester hours
   BIO 110, 214, 215, 217, 220, 230, 270, 465, and 490
2. BIO 407 and 408 (internship) — 32 semester hours
   Selected under advisement

Minor in Biology

The Department of Biology offers a minor in biology. The biology minor requirements are:

1. BIO 110, General Biology (must be passed with a C– or better), or BIO 100, Basic Biological Science (must be passed with a grade of A).
2. BIO 215, General Botany or BIO 217, General Zoology (must be passed with a C– or better).
3. After fullfillment of requirements 1 and 2, additional biology elective courses, for which the student has the appropriate prerequisites, will be selected under advisement with the minor adviser. These courses will be at the 200 level or higher, and 8–9 credits must be over and above courses required for the student's major.
4. A minimum of 17 credits and a maximum of 21 credits must be taken for a minor in biology.
5. To graduate with a biology minor, students must maintain a GPA of 2.00 in the minor courses, and they must meet with the minor adviser at least once per semester.

NOTE (transfer students only): In order to receive a degree in biology from West Chester University, a transfer student must successfully complete a minimum of 12 semester hours of biology courses in the West Chester University Department of Biology.

Advanced Placement Policy

A score of three on the Biology Advanced Placement Exam of the Scholastic Aptitude Test (SAT) will allow a student to begin his or her studies without having to take BIO 110, General Biology. Students who are granted advanced placement in biology take an additional three hours of electives in biology.

*Biology core courses must be passed with a grade of C– (70) or better.
**CHE 491 may be substituted for BIO 490.

COURSE DESCRIPTIONS
BIOLOGY

Symbol: BIO unless otherwise shown (3,2) represents three hours of lecture and two hours of lab.

★100 **Basic Biological Science** (3) Basic principles of biology. Cell theory, metabolism, genetics, development, diversity of life forms, and ecology. Not open to biology majors. (2,2)

★101H **Basic Biology Honors** (4) An introduction to basic biology for nonmajors in the Honors Program. (2, 2, one hour of recitation)

#102 **Humans and the Environment** (3) The effects of human population on earth's resources are studied against a background of physical, biological, and health sciences.

★110 **General Biology** (3) The concepts general to all living organisms such as cell structure and function, genetics, evolution, and ecology. This course is designed for majors in biology and related scientific areas. (2,3)

150 **Contemporary Issues in Biology Teaching** (1) Secondary science curriculum, professional organizations, and academic preparation of science and teachers. (1,1) May not be taken as a biology major elective.

172 **Field Ecology and Natural History** (3) Class and field work in natural history and ecology. Identification of local organisms and pertinent ecological concepts. Not counted toward a biology major. (2,3) PREREQ: Permission of department.

204 **Introductory Microbiology** (4) The biology of medically important microorganisms, their structure, taxonomy, physiology, control, and host-parasite interactions. (3,2) PREREQ: BIO 100 and one semester of chemistry. May not be taken as a biology major elective.

214 **General Microbiology** (4) The biology of microorganisms, their structure, physiology, and control; the nature and dynamics of disease and disease control; principles of food, industrial, and environmental microbiology. The laboratory will deal with microbiological techniques, isolation and identification of microbes, and water and food analysis. This course is for biology majors. (3,3) PREREQ: BIO 110 and one semester of chemistry.

215 **General Botany** (3) A survey of plant and plant-like organisms from bacteria to and including the angiosperms with emphasis on anatomy, physiology, reproduction, and economic importance. (2,3) PREREQ: BIO 110.

217 **General Zoology** (3) Principles of animal biology. Form and function of vertebrate and invertebrate animal types (2,3) PREREQ: BIO 110.

220 **Cell Physiology** (3) An introduction to cellular and molecular biology with emphasis on cell morphology, biochemistry, and cell physiology. (2,3) PREREQ: BIO 110 and CHEM 230 or 231 (may be taken concurrently).

230 **Genetics** (3) Nature of genetic material and its qualitative and quantitative variation: recombination; interaction of gene products; regulation of genetic material; and its role in evolution. (2,3) PREREQ: BIO 110 and MAT 121.

259 **Human Anatomy and Physiology I** (4) An introduction to human structure and function. Skeletal, muscular, and nervous systems are emphasized. Laboratory involves study of the human skeleton and dissection of preserved cats. (3,2) May not be taken as a biology major elective.

269 **Human Anatomy and Physiology II** (4) Continuation of BIO 259. Circulatory, respiratory, digestive, and urogenital systems emphasized.

★ Approved distributive requirement course.
Approved interdisciplinary course.

(3,2) May not be taken as a biology major elective. PREREQ: BIO 259.

270 **General Ecology** (3) Relationships between living organisms and their environment. (2,3) PREREQ: BIO 110. Recommended are BIO 215, 217, MAT 121, and one semester of computer science.

275 **Field Botany** (3) Methods of studying plants in their natural surroundings. Use of keys, botanical manuals, and illustrated floras to identify living specimens. (2,3) PREREQ: BIO 100 or 215.

277 **Vertebrate Ecology** (3) Animal life in the surrounding localities. Identification, behavior, habitats, feeding, and reproduction. (2,3) PREREQ: BIO 100 or 217. Offered in fall of odd-numbered years.

307 **Pathophysiology** (3) An integrated study of the processes involved in the total body systemic complex as it changes from the ordered homeostatic condition to the imbalanced diseased state. The use of disease models, with clinical considerations, strengthens the concepts. (3) PREREQ: BIO 259 and 269. Offered in fall. May not be taken as a biology major elective.

310 **Biometrics** (3) The experimental design and computer-assisted statistical analysis of biological research problems. (2,3) PREREQ: BIO 110 and MAT 121.

314 **Diagnostic Bacteriology** (3) Systematic study of pathogenic bacteria with extensive laboratory experience in handling and identifying these organisms. (3,3) PREREQ: BIO 214.

357 **Comparative Vertebrate Anatomy** (4) Comparative study of the principal organ systems of vertebrates as to their structure, function, and evolutionary relationships. (2,4) PREREQ: BIO 217. Offered in fall.

367 **Physiology of Drug Interaction** (3) An introduction to the mechanism of action of prototype drugs. The physiological alterations produced by various drugs as well as interactions between drug classes will be emphasized. (3) PREREQ: BIO 269 or equivalent.

372 **Aquatic Biology** (3) A laboratory and field-oriented course in the ecology and biota of streams and wetlands. (2,3) PREREQ: BIO 215, 217, 270. Offered in fall of odd-numbered years.

377 **Entomology** (3) The structure, function, classification, economic importance, and biological significance of insects. (2,3) PREREQ: BIO 110 or 217. Offered every other year.

407 and 408 **Internship in Medical Technology** (16 for each semester, total of 32) A two-semester, work-study appointment with an affiliated hospital. The satisfactory completion of this internship is accepted as the senior year's work by West Chester University. This internship will prepare the student to take the National Exam for Medical Technologists. PREREQ: Students who have completed all required courses and 96 credit hours in the B.S. biology general concentration may apply for this internship in the spring semester of their junior year. Students must have an overall GPA of 2.75 and a GPA of 2.50 in the sciences (biology, chemistry, and physics) and approval from the Department of Biology and the affiliated hospital.

◆ 409 **Internship in Biological Sciences** (3-16) A one-semester, work-study appointment with a commercial, industrial, or governmental agency. Students will be supervised jointly by the professional scientist of the agency and a Department of Biology faculty member. A maximum of eight combined credits from BIO 409 and BIO 491 may be applied to biology electives. PREREQ: Senior standing, GPA of 2.50, and approval of biology curriculum committee.

421 **Cellular and Molecular Biology** (4) A lecture and laboratory course that studies the molecular basis of cellular life. Eukaryotic cell structure and function will be emphasized. (3,3) PREREQ: BIO 110, 215 or 217, 220, 468; CHE 103, 104, 231, 232; CRL 103, 104, 231, 232; MAT 121; and one semester of calculus.

428 **Animal Histology** (3) A study of the microscopic structure and function of vertebrate tissues and organs. (2,2) PREREQ: BIO 110 and 217, or permission of the instructor. Offered in fall.

429 **Microtechnique** (2) An introduction to histological and histochemical laboratory techniques. (4) PREREQ: BIO 428 or permission of instructor.

431 **Molecular Genetics** (3) A second course in genetics, covering the molecular biology of genetic events. Emphasis will be on the molecular details of basic genetic processes, such as DNA replication and transcription, RNA translation and protein synthesis, the genetic code, molecular mechanisms of gene regulation, and an introduction to "biotechnology." (3) PREREQ: BIO 230 and CHE 232.

◆ 435-438 **Course Topics in Biology** (1-3) Courses in this series are of timely interest to the student. Topics may include biological terminology, laboratory techniques, mycology, etc. Open only to junior and senior science majors.

448 **Animal Development** (4) Introduction to principles of animal development with laboratory study of vertebrate embryos. (3-3) PREREQ: BIO 110, 217, 220, and 230. Offered in spring.

452 **Parasitology** (3) Biology of the principal parasites of man and domestic animals. Emphasis is on life cycles of common parasites, identification of diagnostic forms, and understanding the diseases associated with parasites of major economic and medical importance. (3) PREREQ: BIO 204 or 214, and 217. Offered in spring of even-numbered years.

454 **Mycology** (3) An introductory course including a general study of the biology of fungi and a survey of the field of medical mycology. (3) PREREQ: BIO 110 plus another three-credit-hour biology course.

456 **Virology** (3) Molecular biology of bacterial, plant, and animal viruses; virus classification, ultrastructure, mechanisms of replication, and effects of virus infection on host cell. PREREQ: One year of organic chemistry and BIO 230.

457 **Functional Animal Morphology** (3) A study of the structure, form, and function of morphological adaptations in animals as examined through a mechanical, ecological, and evolutionary perspective. (3) PREREQ: BIO 217.

464 **Microbial Physiology** (3) Physiology and biochemical variations seen in prokaryotes and lower eukaryotes. (2,4) PREREQ: BIO 214 and 230, and CHE 232.

465 **Immunology** (4) Immunoglobulin structure and function, nature of antigens, cell-mediated immunity, hypersensitivity, regulation of immunity, and immunological diseases. Laboratory experience in immunological techniques. (3,3) PREREQ: CHE 232.

466 **Plant Physiology** (3) Physiological processes of plants. Photosynthesis, respiration, intermediary metabolism, entrance of solutes into the plant, water metabolism, and growth regulators. (2,3) PREREQ: BIO 215 and CHE 231

467 **Endocrinology** (3) An integrative look at the physiology of the mammalian endocrine system in the regulation and maintenance of homeostasis. The pathology associated with hormonal imbalance will be included. (3) PREREQ: BIO 220 and BIO 468. Offered in spring of odd-numbered years.

468 **General Animal Physiology** (4) General theoretical and applied principles of the physiology of various animal cells, tissues, and organs with an emphasis on homeostasis and mammalian physiology. (3,3) PREREQ: BIO 110, CHE 232, and MAT 161.

470 **Population Biology** (3) A quantitative, second course in ecology, emphasizing distributional patterns and fluctuations in abundance of natural populations. (2,3) PREREQ: BIO 270, MAT 121, and one semester of calculus.

471 **Wetlands** (3) A course designed to provide practical experience in wetlands' classification, delineation, regulation, management, and mitigation practices. The abiotic and biotic characteristics of inland and coastal wetlands are emphasized. (2,3) PREREQ: Eight hours of biology or permission of instructor.

475 **Plant Communities** (3) A survey of ecological, morphological, and physiological strategies of plants from seed through adult stages. The integration of these strategies to explain the major plant communities of North America will be covered. (2,3) PREREQ: BIO 215.

476 **Limnology** (3) The measurement and analysis of the physical, chemical, and biological properties of lakes. (2,3) PREREQ: BIO 110 and CHE 103-104.

480 **Light Microscopy and the Living Cell** (3) A one-semester lecture and lab course covering the theory and practical techniques of all types of light microscopy and their uses in investigating living cells. Also includes techniques such as microinjection, cell electrophysiology, and others. Strong emphasis on "hands-on" work with equipment. (2,2)

484 **Epidemiology** (3) A general study of the epidemiology of both infectious and noninfectious diseases, including industrial and environmentally related health problems. (3) PREREQ: BIO 214.

485 **Systematic Botany** (3) Principles of evolution as illustrated by the principles of plant taxonomy. Modern concepts of biosystematics. Practical experience in plant identification. (2,3) PREREQ: BIO 215.

490 **Biology Seminar** (1) Reports on special topics and current developments in the biological sciences. PREREQ: BIO 110, 215 or 217, 220, 230, and six hours of 300-400 level biology courses.

◆ This course may be taken again for credit

◆ 491 Special Problems in Biology (1-3) Tutorial course primarily for advanced undergraduate biology majors capable of independent study and research on a problem approved by the supervising instructor. A maximum of eight combined credits from BIO 409 and BIO 491 may be applied to biology electives. PREREQ: Permission of instructor.

#SCB 210 The Origin of Life and the Universe (3) An interdisciplinary course that presents the theory and evidence for the first three minutes of the universe and formation of the stars, galaxies, planets, organic molecules, and the genetic basis of organic evolution. (3) May not be taken as a biology major elective. PREREQ: High school or college courses in at least two sciences.

SCB 350 Science Education in the Secondary School (3) A methods course emphasizing knowledge of curricular development and skill in planning, involving the design and execution of learning activities for all instructional modes. (2.2)

◆ This course may be taken again for credit
Approved interdisciplinary course.

Department of Chemistry
(See also Pre-Medical Program)

Jamal Ghoroghchian, *Chairperson*

PROFESSORS: Durand, Fenton, Goudy, Magnuson, Mangravite, Moran, Rudnick, Torop, Witonsky

ASSOCIATE PROFESSORS: Ahmad, Barth, Cichowicz, Ghoroghchian, Reid, Ressner

ASSISTANT PROFESSORS: Frost, Falcone

The Department of Chemistry offers five undergraduate degree programs:

(1) The B.S. in CHEMISTRY program (certified by the American Chemical Society) enables students to receive basic preparation required for the careers in chemistry of their choice. Such choices include positions as college and university teachers, professional chemists, researchers, and in various services in industry and government. In all cases, the program prepares students for graduate study in the field of chemistry.

(2) The B.S. in CHEMISTRY-BIOLOGY (Pre-Medical) provides the core courses required for admission to schools of medicine, dentistry, and veterinary medicine. It also enables the student to pursue a career in biochemistry and molecular biology.

(3) The B.S. in CLINICAL CHEMISTRY is a program that trains students for careers in hospitals or private, clinical chemistry laboratories. A one-semester internship in a hospital clinical chemistry laboratory is a mandatory part of this program. Students completing the program are eligible for certification as clinical chemistry technologists by the National Registry in Clinical Chemistry.

(4) The B.S. in FORENSIC CHEMISTRY is a program that trains students interested in working in criminalistics and toxicology laboratories. The program prepares students for graduate study and specialization in these fields. A one-semester internship in a police or toxicology forensic-chemistry laboratory is a mandatory part of this program.

(5) The B.S. in EDUCATION in CHEMISTRY program prepares the student for a career in teaching chemistry in secondary schools. The program gives the student experience in the major branches of chemistry so that, with proper selection of electives, graduate work in either pure chemistry or chemistry education can be pursued. Sufficient flexibility is provided so that the student also may become certified in general science.

The Department of Chemistry is accredited by the American Chemistry Society, which provides its professional certification to graduates of the B.S. in chemistry program.

Majors in the five B.S. programs should consult the Department of Chemistry handbook and their adviser for current requirements. A grade of C– or better is necessary in all required science and math courses.

Internship Program

Although internships are not a mandatory part of all chemistry programs, they are available to majors on a selective basis. Students receive varying amounts of credit based on the number of hours spent in a work situation and on the nature of the academic work necessary during the internship. Credit varies from three to 15 semester hours; each eight-hour workday per week is equivalent to three semester hours.

REQUIREMENTS COMMON TO ALL DEGREE PROGRAMS

1. General Requirements, see pages 35–39	51 semester hours
2. Chemistry Requirements CHE 103-104 and CRL 103-104	10 semester hours
3. Other Science Requirements PHY 170-180	8 semester hours
4. Mathematics Requirements CSC 141 and MAT 161-162	11 semester hours

BACHELOR OF SCIENCE — CHEMISTRY

1. Required Chemistry Courses CHE 231, 232, 233, 321, 341, 342, 411, 418, 424, 471, and 491; and CRL 232, 233, 321, 341, 342, and 424	43 semester hours
2. Chemistry Electives Selected from upper-division chemistry courses	9 semester hours
3. Other Required Courses Foreign languages, mathematics, or computer science electives	9 semester hours

BACHELOR OF SCIENCE — CHEMISTRY-BIOLOGY

1. Required Chemistry Courses CHE 231, 232, 321, 345, 471; CRL 232; and one from among CRL 321, 341, and 471	22 semester hours
2. Required Biology Courses BIO 110, 217, 230, 357, 448, and 468	24 semester hours
3. Other Required Courses MAT 121 and concentration elective	6 semester hours

BACHELOR OF SCIENCE — FORENSIC CHEMISTRY

1. Required Chemistry Courses CHE 231, 232, 321, 345, 371, 418, 450, 471, and 479; and CRL 232, 321, 341, 371, and 471	45 semester hours
2. Other Required Courses BIO 110 and 468; CRJ 200; and MAT 121	14 semester hours

BACHELOR OF SCIENCE IN EDUCATION — CHEMISTRY

1. Required Chemistry Courses CHE 231, 232, 321, 341 or 345, 409, 411, 418, and 491; CRL 232, 321, and 341	24 semester hours
2. Required Education Courses EDF 100; EDM 300; EDP 250, 351; EDS 306, 412; and SCE 350	30 semester hours
3. Chemistry Electives Selected from upper-division chemistry courses	5 semester hours

BACHELOR OF SCIENCE IN CLINICAL CHEMISTRY

1. Required Chemistry Courses CHE 231, 232, 321, 341 or 345, 381, 418, 424, 450, 471, and 491; CRL 321, 341, 381, 424, and 471	46 semester hours
2. Other Required Courses BIO 110, 468; MAT 121	11 semester hours

COURSE DESCRIPTIONS
CHEMISTRY
Symbol: CHE

Symbol for chemistry labs: CRL (2,2) represents two hours lecture and two hours lab

★100 **Concepts of Chemistry** (3) A broad survey course with a laboratory experience that seeks to develop an understanding of the field of chemistry through inquiry. Basic competence in scientific methods and procedures will be obtained by observing chemical reactions and studying the chemical and physical properties of a variety of compounds. (2,2)

101 **Fundamentals of Chemistry** (3) A mathematically oriented course for students who intend later to take CHE 103 but whose science and mathematics backgrounds are judged by a pretest to need remediation.

★102 **Essentials of Chemistry** (4) Fundamentals of inorganic, organic, and biological chemistry as applied to the contemporary problems of society. A one-semester course that best serves students pursuing careers in health and physical education. (3,1)

†103-104 **General Chemistry I-II** (3) (3) Basic laws and theories of chemistry, including atomic structure, chemical bonding, oxidation-reduction, solutions, and ionic equilibria. Correlations of chemical principles and their application to modern descriptive chemistry. CHE 103 must precede CHE 104.

CRL 103-104 **Experimental General Chemistry I-II** (2) (2) Basic laboratory studies in college chemistry utilizing the quantitative approach. Semimicro qualitative analysis and inorganic preparations. CONCURRENT or PREREQ: CHE 103-104. CRL 103 must precede CRL 104. (One hour of recitation precedes three hours of lab.)

†105-106 **General Chemistry I-II: Advanced Level** (3) (3) These courses are similar to CHE 103-104 but with a presentation that is in greater depth and rigor. PREREQ: High school chemistry or the equivalent and approval of the department chairperson. CHE 105-106 may be substituted for CHE 103-104 as prerequisites for advanced-level chemistry courses.

CRL 105-106 **General Chemistry I-II: Advanced-Level Laboratory** (2) (2) These laboratories are similar to CRL 103-104. CONCURRENT or PREREQ: CHE 105-106. CRL 105 must precede CRL 106.

#107 **General Chemistry for the Allied Health Sciences** (4) A one-semester treatment of the fundamentals of chemistry, including atomic structure and bonding, types of reactions, kinetics, equilibrium, and thermodynamics. May not be taken as a chemistry major elective. CRL 107 may be taken concurrently or after CHE 107.

★CRL 107 **General Chemistry Lab for Allied Health Science** (1) A one-semester laboratory course to complement CHE 107. Basic laboratory techniques, both qualitative and quantitative, will be used to illustrate principles from the lecture. CHE 107 must be taken concurrently or before CRL 107.

230 **Introduction to Organic and Biological Chemistry** (3) A terminal course in fundamentals of organic chemistry. Structural theory of organic molecules, organic synthesis, and biological applications. PREREQ: CHE 104.

231-232-233 **Organic Chemistry I-II-III** (4) (3) (3) A comprehensive study of the structure and reactions of organic molecules. CHE 231 must precede 232 which must precede 233. PREREQ: CHE 104 or CHE 106.

CRL 232-233 **Experimental Organic Chemistry I-II** (2) (2) Basic laboratory skills in organic chemistry including classical as well as instrumental techniques. Organic synthesis and modern spectrophotometric methods of identification. CONCURRENT or PREREQ: CRL 104 and CHE 232-233. CRL 232 must precede CRL 233.

300 **Fundamentals of Radioisotope Techniques** (3) (Also PHY 320) Biological, chemical, environmental, and physical effects of nuclear radiation. Radiation detection instrumentation and radio tracer methodology. (2,2) PREREQ: CHE 104 or 106 and PHY 140 or 180.

310 **Introductory Biochemistry** (3) The chemical nature of biological phenomena is presented. Particular emphasis is placed upon the metabolic pathways and the enzymes responsible for these processes with applications to nutrition. PREREQ: CHE 230 or 231. (Not for chemistry majors.)

321 **Analytical Chemistry I** (3) Fundamental principles of analytical chemistry. Theory of gravimetric and volumetric methods of analysis. Lab: CRL 321. PREREQ: CHE 104 or 106.

CRL 321 **Analytical Chemistry I** (2) Practical experience in modern techniques of chemical analysis with emphasis on volumetric and gravimetric methods. CONCURRENT or PREREQ: CHE 321.

SCC 327 **Electron Microscopy I** (3) (Also ESL 327) An introductory lecture/lab course in theory, operation, and applications of electron beam microscopy. PREREQ: One year of physics and one year of chemistry.

SCC 329 **Electron Microscopy II** (3) (Also ESL 329) A one-semester lecture/laboratory course in advanced theories, operation, and applications of electron microscopy in scientific research. Emphasis on individual projects. PREREQ: SCC 327.

341-342-343 **Physical Chemistry I-II-III** (3) (4) (3) The mathematical laws and theories of chemistry including thermodynamics, reaction kinetics, quantum and statistical mechanics, and the theory of chemical bonding and molecular structure. PREREQ: CHE 104 or 106, MAT 142 or 162, and PHY 180.

CRL 341-342 **Experimental Physical Chemistry I-II** (2) (2) Laboratory exercises in illustrating principles of thermodynamics, kinetics, and quantum mechanics. CONCURRENT or PREREQ: CHE 341-342.

345 **Fundamentals of Physical Chemistry** (3) A survey of the fundamental topics in physical chemistry with applications to biology and medicine. Primarily for biology, chemistry-biology, and preprofessional majors. PREREQ: CHE 232, MAT 141 or 161, and PHY 140 or 180.

CRL 345 **Basic Experimental Physical Chemistry** (2) Experiments illustrating the laws of physical chemistry. Primarily for biology, chemistry-biology, and preprofessional majors. CONCURRENT or PREREQ: CHE 345.

350 **Theory of Spectroscopy** (1) An introduction to the theoretical background of spectroscopic methods. Includes quantum mechanical aspects and group theory. PREREQ: CHE 232.

351 **Introduction to Infrared Spectroscopy** (1) IR experimental methods including CW and FT techniques. Functional group analysis and spectral interpretation. PREREQ: CHE 350.

352 **Introduction to NMR Spectroscopy** (1) An introductory course in NMR spectroscopy dealing with spin 1/2 systems. Chemical shift and couplings will be discussed. PREREQ: CHE 350.

353 **Introduction to Mass Spectrometry** (1) Instrumentation and experimental techniques (EI and CI). Interpretation of spectra and computer searching. PREREQ: CHE 350.

354 **Introduction to Chromatography** (1) Basic theory of chromatography and a discussion of GC analysis. PREREQ: CHE 104.

355 **Introduction to Liquid Chromatography I** (1) Theory equipment and methods of liquid chromatography—TLC. PREREQ: CHE 354.

356 **Introduction to Liquid Chromatography II** (1) HPLC and SCF liquid chromatographic technique will be discussed. PREREQ: CHE 355.

371 **Forensic Chemistry** (3) Introduction to criminalistics (chemical, forensic, analytical techniques) with the role, functions, operations, and organization of a scientific police laboratory. PREREQ: CHE 104 or 106 and CHE 232.

CRL 371 **Forensic Chemistry Lab** (2) Identification and comparison of trace evidence utilizing modern instruments and classical wet methods of chemical analysis. CONCURRENT or PREREQ: CHE 371.

381 **Clinical Chemistry** (3) Analysis of biological fluids. Clinical significance of enzyme, electrolyte, protein, and carbohydrate analysis. Requires permission of instructor or preparation in organic chemistry and quantitative analysis. CONCURRENT or PREREQ: CHE 471.

CRL 381 **Clinical Chemistry Laboratory** (2) Practical experience in analysis of biological fluids for diagnostic parameters. Nature of biological sampling, sample preservation, methodology, statistics, and quality control. CONCURRENT or PREREQ: CHE 381, CHE 471, and CRL 471.

403 **Chemistry of the Environment** (3) The chemistry of the atmosphere, hydrosphere, and biosphere; man's impact on these areas. PREREQ: CHE 104. May also be offered with lab. (2,2)

404 **Foundations of Nutrition** (3) Proteins, lipids, fats, vitamins, and minerals and their role in normal metabolism; nutrition and disease; metabolism and biochemical individuality; cultural and political aspects of nutrition. PREREQ: CHE 104 and 230 or 231.

408 **Industrial Pollution** (3) Applications of elementary chemical engineering to the industrial complexities of the environmental processes. Emphasis on unit operations and unit processes applicable to pollution control and abatement. PREREQ: CHE 104.

409 **Descriptive Inorganic Chemistry** (3) Emphasis is on the periodic properties of the representative elements, the structure of inorganic solids, the chemistry of aqueous and nonaqueous solutions, and the study of some transition metals. Lanthanides and actinides also are studied. PREREQ: CHE/CRL 104.

◆ 410 **Advanced Independent Study or Chemical Research** (3-6) Taken under the direct supervision of a faculty member. May be taken for two semesters for a total of six credits. PREREQ: Senior standing or permission of department chairperson.

411 **Advanced Inorganic Chemistry** (3) Structure and properties of the elements and inorganic compounds from a theoretical point of view. Atomic structure and the periodic law; molecular structure and bonding, including symmetry and MO theory; structure, bonding, and reactivity of transition-element compounds and main group compounds; acid-base chemistry. PREREQ: CHE 341. CONCURRENT: CHE 342.

★ Approved distributive requirement course
† Approved two-semester substitute for distributive requirement.
# Approved interdisciplinary course.
◆ This course may be taken again for credit.

417 History of Chemistry (1) The history of chemistry and its predecessors from earliest times to the present day. PREREQ: CHE 104 or 106.
418 Literature of Chemistry (1) Instruction in the use of a modern chemical library, reference and data acquisition, synthetic procedures, and computer data bases. PREREQ: CHE 231.
419 Ethics and Human Values in Science (1) A one-semester course for science majors to acquaint students with potential ethical problems in their professional careers. PREREQ: CHE 104 or 106.
424 Analytical Chemistry II (3) Basic principles of applied instrumental analysis. Special emphasis on the use of spectrophotometric and electroanalytical instrumentation. PREREQ: CHE 321 and 341. CONCURRENT: CHE 342.
CRL 424 Analytical Chemistry II Laboratory (2) Practical experience in the choice and application of instrumental methods of analysis to chemical systems. CONCURRENT or PREREQ: CHE 424.
CRL 435 Qualitative Organic Analysis (5) The use of classical and instrumental methods for identification of organic compounds. PREREQ: CRL 233 and 321, CHE 418, or permission of instructor. (Two hours of lecture)
CRL 435 Qualitative Organic Analysis Lab (0) This laboratory is required of students taking CHE 435. Wet chemical techniques for functional group identification and derivative preparation are combined with modern instrumental methods such as infrared, ultraviolet, and NMR spectroscopy to provide the methodology for rapid, efficient identification of unknowns. Six hours of lab per week.
436 Polymer Chemistry (3) Polymerization kinetics, rheology of polymer melts, crystallization parameters, and monomer reactivity in copolymerization. PREREQ: CHE 232.
CRL 436 Polymer Chemistry Laboratory (2) Synthesis of polymers; molecular, physical, and thermal characterization of polymers. Instrumental methods include X-rays, IR, electron microscopy, and thermal analysis. CONCURRENT: CHE 436.
◆ 450 Internship in Chemistry (3-15) A full- or part-time work-study appointment in a hospital, or a commercial, governmental, or industrial laboratory supervised jointly by an on-site supervisor and Department of Chemistry faculty member. PREREQ: Permission of department internship committee.
471 Fundamentals of Biochemistry (3) Structure and chemistry of proteins and nucleic acids; molecular biology, physio-chemical methods for biomacromolecules, enzymes, and the molecular basis for some physiological phenomena. PREREQ: CHE 232 and CHE 345 or equivalent, or permission of instructor.
CRL 471 Experimental Biochemistry (2) Laboratory exercises in the fundamentals of biochemistry. CONCURRENT or PREREQ: CHE 471 or 476.
CRL 472 Experimental Biochemistry II (2) A second-semester laboratory course in biochemistry that stresses the use of advanced analytical instruments to characterize biologically important molecules and to elucidate their mechanism of action. PREREQ: CHE 471 or 476 and CRL 471.
476-477 Biochemistry I-II (3-3) A two-semester course in biochemistry. The first part shows how the chemistry of amino acids, proteins, enzymes, carbohydrates, lipids, and membranes enables living organisms to perform biological functions. The second part covers biosynthesis of diverse molecules, DNA structure and function, and molecular physiology including immunoglobulins, hormones, nutrition, and nerve action. Chemistry will be related to normal and pathological/biological function. PREREQ: BIO 110, CHE 232, and CHE 345 or equivalents. CHE 476 must precede CHE 477.
479 Chemical Toxicology (3) A one-semester course in the environmental and physiological aspects of chemical toxicity. Special emphasis will be placed on documentation, sampling, and verification of materials. PREREQ: CHE 232.
CRL 479 Chemical Toxicology Laboratory (2) A one-semester course in the basic principles of toxicological analysis. CONCURRENT or PREREQ: CHE 479.
◆ 480 Introduction to Chemical Research (2-6) The student carries out an independent chemical research project under the direction of a faculty member. The faculty member assigns the research topic and background literature readings and works closely with the student in the research laboratory giving instruction in laboratory techniques. The student may be required to write a final research report. PREREQ: Senior standing or permission of department chairperson.
491 Seminar in Chemistry (1) Oral presentation of papers based on laboratory or library research. PREREQ: Permission of department chairperson.
SCC 370 Science and Human Values (3) A one-semester course illustrating the impact of science on human thought, values, and institutions. Ethical, sociological, and psychological aspects of science-mediated change are covered in depth.
≠SCB 210 The Origin of Life and the Universe (3) An interdisciplinary course that presents the theory and evidence for the first three minutes of the universe and formation of the stars, galaxies, planets, organic molecules, and the genetic basis of organic evolution. (3) PREREQ: High school or college courses in at least two sciences. Offered fall semester only.

◆ This course may be taken again for credit.
≠ Approved interdisciplinary course.

Department of Communication Studies

Dennis R. Klinzing, *Chairperson*

PROFESSORS: Casagrande, Klinzing, Orr

ASSOCIATE PROFESSORS: Foeman, McCullough, Pearson

ASSISTANT PROFESSORS: Dean, Jenks, Martz, Newell, Reed, Remland

The Department of Communication Studies offers two programs. One program leads to the Bachelor of Arts degree and the other leads to the Bachelor of Science in Education.

1. The B.A. in COMMUNICATION STUDIES focuses on oral communication as the core of a liberal education that can be applied to a number of specializations.

2. The B.S. in EDUCATION—COMMUNICATION is for students who wish to meet the state of Pennsylvania requirements for teacher certification in communication.

Majors are expected to meet with their advisers to plan a course of study, to select courses prior to scheduling, to discuss career opportunities, and to keep abreast of departmental cocurricular activities. Handbooks are provided to help students be aware of requirements for each program in the department. Students who wish to transfer into the B.A. Communication Studies program must have a 2.00 GPA or better.

Departmental Student Activities

The Forensic Society and the Communication Club are student organizations that involve department faculty and resources. The activities of these organizations are open to all students. For more information see the "Student Affairs" section.

Department Internships

Internship experiences are available in all areas related to students' vocational and academic interests. Students have been placed in offices of congressmen, radio and television stations, and local industries. Students and their placements are screened to assure mutual satisfaction for all parties involved. For details, students should check with the department's internship coordinator.

REQUIREMENTS COMMON TO THE B.A. AND B.S. PROGRAMS

General Education Requirements — 51 semester hours
See pages 35–39

BACHELOR OF ARTS—COMMUNICATION STUDIES

1. Required Courses — 36 semester hours

COM	204	Dyadic Communication
+COM	208	Public Communication
COM	212	Mass Communication
COM	216	Small Group Communication
+COM	219	Communication Concepts

+Prerequisite (C grade or better) to all COM 300/400 courses except 310 or 315.

+COM 224 Communication Research
++COM 304 Organizational Communication
COM 307 Nonverbal Communication
COM 312 Intercultural Communication
COM 403 Persuasion
COM 405 Argumentation and Debate
COM 415 Language, Thought and Behavior

2. Additional Notes
   a. Limited substitutions may be made to the required courses with the adviser's written consent.
   b. A grade of C or better must be earned in each required course and a 2.5 average must be achieved in the aggregate of required communication courses before graduation will be recommended.
   c. To encourage B.A. Communication Studies majors to develop communication competence that extends beyond oral English, a grade of C or better is required in ENG 120 and 121, and a grade of C– or better is required in the 202-level course of a foreign language. If majors employ the culture cluster option to fulfill their language requirement, a C– or better is required in the 102 level of the foreign language course and in each of the culture cluster courses.
   d. Students who exhaust their course repeat options and have not earned a grade of C or better in a prerequisite communication course will be dismissed from the program. The department chair will offer an exit interview to each student who is dismissed and help him/her to identify available alternatives.

3. Foreign Language/Culture Requirement 0-15 semester hours
See page 38.

4. Applied Area 27-42 semester hours
Courses are to be selected in consultation with an adviser to meet career objectives.

BACHELOR OF SCIENCE IN EDUCATION—COMMUNICATION

1. Core Requirements 30 semester hours
COM 208, 219, and 415; ENG 230, 331, 335 or 339; LIT 200 or 201, 202 or 203, 230 or 231; English composition as advised

2. Emphasis Area Requirements 30 semester hours
Choose two areas
   a. Communication Requirements (15 credits)
   COM 216, 224, 307, and 405; THA 102
   Participation in forensics activities is required.
   b. Theatre Requirements (15 credits)
   THA 101 (to be taken as a general education arts requirement), 103, 104, 210, 301, and 306 or 307. Participation in theatre productions is required.
   c. Media Requirements (15 credits)
   COM 202, 212, 320, and 217 or 317; JRN 200

3. Professional Education Requirements 30 semester hours
COM 402, EDF 100, EDM 300, EDP 250 and 351, and EDS 306 and 412

Minor in Communication Studies 18 semester hours

This minor may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program. Required courses are COM 204, 208, 212, 216, 219, and 224.

+Prerequisite (C grade or better) to all COM 300/400 courses except 310 or 315.

++COM 216 is a prerequisite for COM 304.

COURSE DESCRIPTIONS
COMMUNICATION STUDIES
Symbol: COM

001 Preparatory Speech Communication (1) This preparatory course will introduce the concepts of listening, organizing thoughts, speaking those thoughts to audiences, and dealing with conflicts in college through the use of effective oral communication. These concepts will be taught through assigned reading, lecture/ discussion, and various activities. Emphasis will be on the integration of basic oral communication skills.

101 Speech Fundamentals: Interpersonal Communication (3) Development of competencies for purposeful speech communication. Awareness of the effects of language on communications. Recognition of the types and purposes of a selected number of communications. Grasp of the role of evidence and organization in spoken messages.

105 Voice Dynamics (3) Training in the creative-esthetic production of speech; includes respiration, phonation, articulation, and resonation.

200 Communication Careers Planning I (1) This course is designed to introduce the first of a two-phase, career-planning process. Self-assessment and exploration is provided through assigned readings, minilectures, reflective exercises, and small group activities.

202 Scripts and Formats for Mass Media (3) Students are required to analyze, evaluate, and produce scripts for a variety of mass media formats. The course emphasis is on radio, television, and film.

204 Dyadic Communication (3) One-on-one communication to give the student a fundamental understanding of the processes and experiences of the most basic type of human communication.

208 Public Communication (3) Development of skills necessary to understand the theory of communication as a problem-solving tool in the community. Special emphasis is on the student's performance as a sender and receiver of messages directed at social action.

210 Photo Communication I (3) A basic course in the use of creative techniques available to the beginning photographer for the production of high-quality slides.

212 Mass Communication (3) A survey course designed to identify, analyze, and evaluate the pragmatic, persuasive, creative, and technical dimensions of mass media.

216 Small Group Communication (3) Introduction to and practice in the structured small group. Emphasis on preparation for, analysis of, and participation in problem-solving-oriented groups.

217 Directing and Producing Documentary Television Programs (3) Planning and producing the nondramatic television production.

219 Communication Concepts (3) A study of human communication that includes a historical view of the field, examinations of definitions of communication, analyses of the nature of theory and the process of theorizing, assessment of perspectives of communication, and construction of models of communication.

220 Multimedia Communication (3) The practical application of communication theory through experiences in photography and multi-media productions. The creative potential of combining sound and various photographic elements will be explored with special attention given to photojournalism as used in advertising, public relations, theatre, and related mass communication fields.

221 Photo Communication II (3) This course will give the student a chance to develop a personal photographic communication style. The student will be encouraged to explore and express his or her personal perceptions through photography.

224 Communication Research (3) An examination of the nature of inquiry and research in communication. Emphasis on understanding and appreciating the strengths and weaknesses of various methods of research in communication.

230 Business and Professional Speech Communication (3) Practice in effective speaking and listening. Interpersonal communication in the business and professional setting, including reports and sales presentations, policy speeches, conference leadership techniques, group dynamics, and speaking.

231 Interviewing in Organizations (3) An introduction to the skills necessary for a variety of organizational interview settings. Students will act as interviewers and interviewees in many types of interviews, work in groups, and give performance feedback to peers.

300 Communication Careers Planning II (1) This second phase of the careers-planning course series examines the initial steps required for finding employment. Topics covered include the jobs-hunting process, resume development, networking, and the transition from college to employment.

303 Modern Trends in Argument (3) Study of the new thinking in argumentation theory. De-emphasizes classic validity and centers on the building of arguments that are acceptable to the listeners. Course focuses on the work of Stephen Toulmin and Chaim Perelman.

304 Organizational Communication (3) An in-depth analysis of the dynamic process of commu-

nication as it occurs in organizational networks. PREREQ: COM 216.

307 **Nonverbal Communication** (3) A study of the verbal and sensory messages we are constantly receiving. Body language and the uses of space, time, touch, objects, and color inherent in the sensory messages we receive.

309 **Advanced Public Speaking** (3) Designing personal strategies, adapting delivery to large audiences, developing oral use of language, and speaking to live or simulated community groups.

310 **Field Experience in Photographic Communication** (3) This course in slide photography will build on the student's previous experiences in photography. The student will develop the technical, visual, and photo communication skills necessary to explore, record, and interpret his or her surroundings through photographic essays and related photo communication projects. These skills will be achieved through field experiences and classroom instruction.

312 **Intercultural Communication** (3) A study of factors that contribute to communication breakdowns between diverse cultures and between fragmented segments within the same society.

315 **Structure of Meetings** (3) This course prepares students to plan formal agendae, write and interpret organizational by-laws and constitutions, and participate in and preside over meetings according to parliamentary procedures.

317 **Directing and Producing the Dramatic Television Program** (3) Planning the program. Preparing the shooting script. Practice in rehearsing with actors and cameras.

318 **Forensics** (3) Study in the philosophy and practice of forensics. Initiating, developing, and administrating a forensic program. Coaching and judging debate and individual events.

320 **Communicating on Television and Radio** (3) For the student who, by career or circumstance, will be required to be on radio and television. The focus of the course will be on three major areas: interviewer/interviewee techniques; acting for television, including working in commercials; and news reporting, including studio and remote locations. PREREQ: THA 103.

330 **Oral Communication for Technical Professionals** (3) The student will explore the oral component of effective communication as it applies to the business and professional world of mathematics, engineering, and science.

355 **Public Relations Principles** (3) An introduction to the role of the public relations practitioner in the formation of public opinion. Communications theory will be combined with specific techniques for working with the press, producing printed material, and conducting special events.

◆ 399 **Directed Studies in Speech Communication** (1-6) Research, creative projects, reports, and readings in speech communication. Students must apply to advisers one semester in advance of registration. PREREQ: Approval of department chairperson. Open to juniors and seniors only.

◆ 400 **Internship in Speech Communication** (3-15) This course provides a structured and supervised work experience in communication. Credits earned are based on amount of time spent on the job. Students must apply to the department internship coordinator and receive approval of the department internship faculty committee to be admitted.

402 **Teaching Communications** (3) Theory and practice in teaching junior and senior high school communication and drama courses, and in directing cocurricular programs in junior and senior high school.

403 **Persuasion** (3) Current theories of attitude and attitude change. Practice in speaking to modify behavior through appeals to the drives and motives of the listener. PREREQ: COM 101 or permission of instructor.

405 **Argumentation and Debate** (3) Functions and principles of argumentation and debate, including analysis, evidence, reasoning, and refutation. Class debates on vital issues.

410 **Conflict Resolution** (3) This course explores the means of resolving conflict through argument, negotiation, mediation, and arbitration.

415 (also LIN 415) **Language, Thought, and Behavior** (3) This course is designed to help students understand the way language functions in the communication process. To accomplish this purpose, various language systems will be examined and one will be selected for in-depth analysis.

◆ 499 **Communication Seminar** (3) Intensive examination of a selected area of study in the field of speech communication. Topics will be announced in advance.

◆ This course may be taken again for credit.

Department of English

Michael Peich, *Chairperson*

PROFESSORS: Brooks, Browne, Gaunt, Green, Kelleher, Kent, McCawley, McGrath, K. Myrsiades, Trotman, Weiss

ASSOCIATE PROFESSORS: Buckley, Echewa, Fordyce, Hunsberger, Kelly, Larsen, Molholt, Peich, Prater, Sabol, Scheffler, Shloss, Ward

ASSISTANT PROFESSORS: Awuyah, Bauerlein, Fishman, Fletcher, Fox, France, Godfrey, Jeffrey, Johnson, Maltby, Micheau, L. Myrsiades, Newcomb, Pflieger, Ramanathan, Smith, Sun, Teutsch

The Department of English offers three degree programs: the Bachelor of Arts in literature, the Bachelor of Arts in comparative literature (in cooperation with the Department of Foreign Languages), and the Bachelor of Science in Education (in cooperation with the School of Education). Each program is planned in consultation with an adviser.

1. The Bachelor of Arts in LITERATURE provides a broad background in English and American literature; valuable training in the critical skills of reading, interpretation, and analysis; intensive practice in writing; and an understanding of the workings of the language. This extremely versatile degree prepares students for graduate studies and law school, and careers in journalism, radio and television, publishing, public relations, and other professions in which skills in reading, writing, and processing information at a sophisticated level are required.
2. The Bachelor of Arts in COMPARATIVE LITERATURE provides a curriculum option for students with an interest in international studies by offering a broad background in European and non-Western culture and literature. See Comparative Literature Studies on pages 80–81.
3. The Bachelor of Science in EDUCATION in ENGLISH prepares students to teach in the secondary schools in Pennsylvania under an Instructional I Certificate. These students will in large part satisfy the requirements for a B.A. in literature, deriving extensive benefits from participation in a carefully constructed program that emphasizes literature as a cultural product and students as active learners. Before receiving permission to student teach, students in this program must satisfy the prerequisites for student teaching listed on page 113 as well as specific Department of English requirements listed on this page.

REQUIREMENTS COMMON TO THE B.A./B.S. ED. PROGRAMS

1. General Requirements (See pages 35–39.)	51 semester hours

BACHELOR OF ARTS IN LITERATURE

1. Foreign Language Requirement	3-12 semester hours
2. Departmental Preparatory Requirement LIT 168 (also a General Education requirement), LIT 295, and LIT 296	6 semester hours
3. Departmental Intermediate Requirements ENG 230; two American literature courses, one before 1860 (A) and one after (B); two British literature courses, one before 1800 (C) and one after (D); and two departmental electives	21 semester hours
4. Departmental Advanced Requirements Three seminars from a selection focusing on topic, author, or theme (LIT 400)	9 semester hours
5. Professional Electives or Minor	0-18 semester hours

6. Additional Electives (to complete 128 semester hours)

BACHELOR OF SCIENCE IN EDUCATION IN ENGLISH

1. Professional Education Requirements — 30 semester hours
   (See page 112.)
2. Departmental Preparatory Requirements — 6 semester hours
   LIT 168 (Gen. Ed.), LIT 295, and LIT 296
3. Departmental Intermediate Requirements — 27 semester hours
   ENG 230, ENG 331, ENG 335; two American literature courses, one before 1860 (A) and one after (B); two British literature courses, one before 1800 (C) and one after (D); two continental literature courses, one through the Renaissance and one after
4. Departmental Advanced Requirements — 9 semester hours
   Three seminars from a selection focusing on topic, author, or theme (LIT 400)
5. Free electives (E) — 6 semester hours

Student Teaching Prerequisites

Students should apply during their sophomore year for acceptance as candidates for teaching certification. Transfer students should apply as sophomores or after completing a year at West Chester.

Grades on Required Courses

Anyone attempting to qualify for student teaching *must* pass each of the following courses with a grade of C or higher: CLS 260; EDF 100; EDM 300; EDP 250 and 351; EDS 306; ENG 120, 121, 230, 331, 335, and 390; LIT 168, 295, and 296; and PSY 100.

A student receiving a grade of C- or lower for any of these courses should retake the course immediately, before attempting courses in the English or education sequence. A student having difficulty with several of the courses listed above should recognize that he or she may not be able to meet the competency requirements for student teaching and should consider withdrawing from the B.S. program.

Grade Point Average

Before receiving approval to student teach, a student must attain an overall GPA of 2.50 or better, including a minimum GPA of 2.50 for all courses attempted within the Department of English.

Competency Examination

A student must pass the test of writing competency given by the Department of English before the application for approval to student teach will be considered. This examination is scheduled each semester and announced in advance by both the Department of English and the Department of Counselor, Secondary and Professional Education. Students are urged to take the exam at the end of their sophomore or beginning of their junior years.

Minor Programs

Students may minor in any of the five following programs. Elective courses are selected in consultation with the student's minor adviser.

Literature Minor

1. Required Courses — 6 semester hours
   LIT 200 or 201, and LIT 230 or 231
2. Elective Courses — 12 semester hours
   One in American Literature and one in English Literature (in a period other than those covered in requirement 1), and any two other LIT courses

Creative Writing Minor

1. Required Course — 3 semester hours
   CRW 201
2. Elective Courses — 12 semester hours
   Any four courses selected from the following: CRW 202, 203, 301, 302, 303, 304, 305, 307, 400, 490, and 491

Film Criticism Minor

1. Required Course — 3 semester hours
   FLM 200
2. Elective Courses — 15 semester hours
   Any three courses selected from the following list with the approval of the adviser: CLS 304, 363, 364, 368, 369, 400, and 410; COM 217 and 317; and FLM 201, 300, and 301

This minor also is listed in the section on Comparative Literature Studies.

Journalism Minor

1. Required Courses — 12 semester hours
   JRN 200, 225, 226, and 250 (Minimum grade of C-)
2. Elective Course — 3 semester hours
   One of the following: JRN 312, 315, 325, and 355
3. An additional three credit hours are to be earned through a supervised internship (ENG 395) in the communications area or through a practicum (JRN 411) based on one semester's supervised service on the University's student newspaper. — 3 semester hours

Organizational and Technical Writing Minor

1. Required Courses — 15 semester hours
   ENG 320, 368, 371, and 420, and three credit hours to be earned through a supervised internship in organizational or technical writing (ENG 395)
2. Elective Course — 3 semester hours
   Choice of COM 330, ENG 270, or computer science course at level CSC 141 or higher

Linguistics Minor

The Department of English is one of several departments participating in the linguistics minor. The description of the linguistics minor and its requirements are found in the section describing interdisciplinary programs on pages 82–83.

The literature and writing minors may be taken as concentrations by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in the liberal studies general degree program.

Internships

A student will be permitted to take an internship under the supervision of the Department of English only if he or she is enrolled in a departmental major or minor program and has met the following requirements:

1. an accumulation of at least 80 semester hours
2. an overall Grade Point Average of at least 2.50
3. an overall Grade Point Average of at least 3.00 in the major or minor program
4. completion of 12 semester hours in courses in the major or minor program (not counting composition courses)
5. a letter of application to the Internship Committee of the Department of English accompanied by a resume and two faculty references
6. a personal interview with two members of the Internship Committee

A student will be limited to 15 hours of internship credit. Students who wish to take more than nine hours of internship credit in one semester must obtain approval from the full committee after submitting an application and an academic transcript in the preceding semester. The Internship Committee will determine the number of credits to be earned during an internship by applying a ratio of 40

hours of work for each hour of academic credit. Students seeking teaching certification may take no more than three semester hours of internship credit within the minimum 128–131 semester-hour range for the undergraduate degree. The internship credits for English majors may be applied to the student/adviser-designed program. Only under exceptional circumstances, and entirely at its discretion, will the Internship Commitee consider applications from students not meeting the departmental requirements.

NOTE: It is the responsibility of the student to demonstrate that he or she has met the academic requirements for an internship.

COURSE DESCRIPTIONS

ENGLISH

Symbol: ENG

020 **Basic Writing** (3) A preparatory course of study emphasizing the basic grammatical, logical, and rhetorical skills that produce effective themes. *NOTE: This course is a prerequisite to ENG 120 for students who have been placed in ENG 020. Credits earned in 0-level courses do not count toward the 128 hours of credit needed for graduation.*

030 **English for Non-Native Speakers** (3) Individualized instruction for the non-native speaker; conversational English, formal written English, reading and listening comprehension, and grammar. (Students should seek placement advice from the ESL program staff before registering.) Also, see note under ENG 020.

120 **Effective Writing I** (3) An intensive course in writing that emphasizes skill in organization and awareness of styles of writing and levels of usage as ways of expressing and communicating experiences.

121 **Effective Writing II** (3) Continues the expository writing experience offered in Effective Writing I, and explores techniques of gathering, evaluating, and selecting materials to be used in writing research papers.

130 **Effective Writing I for Non-Native Speakers** (3) An intensive course in writing for the non-native speaker of English, emphasizing skill in organization and awareness of styles of writing and levels of usage as ways of expressing and communicating experiences. *For non-native speakers of English. ENG 130 is comparable to ENG 120 for international students only. (Students should seek placement advice from the ESL Program staff before registering.)*

131 **Effective Writing II for Non-Native Speakers** (3) Continues the expository writing experience offered to non-native speakers in English 130, and explores techniques of gathering, evaluating, and selecting materials to be used in writing research papers. *For non-native speakers of English. ENG 131 is comparable to ENG 121 for international students only. (Students should seek placement advice from the ESL Program staff before registering.)*

132 **Effective Speaking I for Non-Native Speakers** (3) After a brief introduction to the differences between writing and speaking, this course focuses on giving directions, explaining concepts, asking questions, giving presentations, and engaging in small talk, interviewing, and extensive pronunciation drills.

134 **Idioms in the Context of American Culture** (3) Through the use of modern American movies, this course helps students learn the meanings of idioms in context. Students practice using these idioms in drills and exercises.

200 **Writing Improvement** (3) A workshop that provides intensive instruction for students who experience difficulty in writing. Not open to freshmen.

204 **Practical Prose Composition** (3) Writing in various modes that authentically mirror real situations in our personal and professional lives.

205 **Writing from Experience** (3) Exploration of the student's personal history and attitudes through carefully structured compositions, including autobiographical narrative, memoir, and introspective analysis.

230 (Also LIN 230) **Introduction to Linguistics** (3) Basic concepts of language description, classification, change, reconstruction, dialectology, and sociolinguistics. (Prerequisite for all courses in English.)

270 **Publishing** (3) A practical examination of the general components of the publishing field with emphasis on book production.

271 **Typography** (3) This course provides students with experience in production of books, using historical and modern methods of design. PREREQ: ENG 270.

275 **Literary Editing and Publishing** (3) Experience in publishing the student literary magazine Daedalus: editing, proofing, photographic selection and layout, and printing.

304 **Essay Workshop** (3) Experience in reading and writing essays, with focus on revision, on the use of the public "I," and on appropriate voice. Attention to invention.

#315 **Interdisciplinary Perspectives on Literacy** (3) The historical and social contexts of English literacy. Emphasis on writing.

320 **Writing in the Professions** (3) Introduction to document analysis and production, the review process, empirical evaluation, and design principles.

330 **English Phonology** (3) Phonemics and morphophonemics in English. Writing systems and phonemic-graphemic relationships in English. Historical development of English sounds. PREREQ: ENG 230.

331 **Structure of Modern English** (3) A detailed analysis of the modern descriptive approach to the study of English grammar and how it compares with the traditional approach. PREREQ: ENG 230.

335 **History of the English Language** (3) Review of the influences on the development of the English language. PREREQ: ENG 230.

339 **History and Dialects of American English** (3) Development of the English language in America since colonial settlement. American and British English. Pronunciation, vocabulary, and grammar of the regional and social dialects of American English. PREREQ: ENG 230.

340 **Sociolinguistic Aspects of English** (3) The study of language in its social context; the ethnography of communication; language and society, social classes, ethnic groups, politics, sex, and education. PREREQ: ENG 230.

350 **Introduction to English as a Second Language** (3) Exploration of the scope of the field, types of programs, and general approaches to instruction.

368 **Organizational Writing** (3) The nature of communication within organizations. Theoretical basis and practical application.

371 **Technical Writing** (3) Instruction in the forms and techniques of written, oral, and visual communication currently practiced in the scientific and technical professions. A series of coordinated assignments leads to a final project in the student's field of professional study. PREREQ: ENG 121.

390 **Teaching English in Secondary Schools** (3) Review of language arts requirements in secondary schools. Special reference to grade-placement with adoption of materials, appraisal of results, and development of programs of study. PREREQ: ENG 230, 331, and 335, EDM 300, EDP 351, and EDS 306.

◆ 395 **Internship** (3-12) Intensive practical experience with selected businesses, media, and public agencies. Limited to qualified students who have earned a minimum of 80 credit hours. See *Handbook for English Majors* for specific requirements.

397 **Writing Tutoring** (3) Theory and practice of writing tutoring, especially for those who plan a career in teaching or who are focusing on the remediation or development of language and writing skills.

◆ 410 **Independent Study** (3)

411-413 **Yearbook Practicum I, II, III** (1) Practical yearbook production experience in a closely supervised framework. PREREQ: ENG 270 or permission of the instructor.

414 **Tutoring Practicum** (1) Supervised experience as an undergraduate tutor for any of the English tutoring programs (e.g., Department of English or Academic Development Program (ADP) tutoring, etc.).

420 **Report and Proposal Writing** (3) Working in writing groups and individually, students complete proposal and report writing projects that respond to organizational needs and criteria. They learn to conceptualize research problems and plan, organize, and design major projects. PREREQ: ENG 368, 371, or graduate status.

◆ 430 **Language Seminar** (3) Studies in English language and linguistics. PREREQ: ENG 230 and at least junior standing.

445 **Women Writing: Autobiography** (3) A writing seminar directed toward the reading of women's autobiographies and the writing of personal autobiographical narratives. A writing-emphasis course.

◆ 450 **Prose Writing Seminar** (3) This variable-topic seminar concentrates on problems in advanced writing, focusing on prose analysis and its application to student writing and revision.

LITERATURE

Symbol: LIT

#162 **Literature of the Apocalypse** (3) An interdisciplinary study of ancient religions, apocalyptic writing, and modern interpretations of that writing. An investigation of the political, economic, moral, and artistic ramifications of the nuclear arms race on modern society.

Approved interdisciplinary course.

◆ This course may be taken again for credit.

★165 **Introduction to Literature** (3) A course designed to develop awareness of literature as being central to all the arts, to increase levels of literacy and critical faculties, and to broaden understanding of the human condition. PREREQ: ENG 120 or permission of the department.
166 **Science Fiction** (3) A critical study of the science fiction novel focusing on the works of contemporary writers such as C.S. Lewis, Asimov, Heinlein, Zalazny, Niven, Anthony, Herbert, LeGuin, and Delaney. (Group E)*
168 **Conventions of Reading** (3) An introduction to the study of textual genres—fiction, drama, poetry, essay, autobiography, and film—and to methodologies of reading. Various cognitive and cultural influences on the reading process will be analyzed.
200 **American Literature I** (3) Survey of representative American writers from Colonial times to 1860, including Bradstreet, Taylor, Franklin, Poe, Thoreau, Hawthorne, and Melville. (A)*
201 **American Literature II** (3) A survey of representative American writers from 1860 to the present, including Whitman, Twain, James, Crane, Eliot, Frost, Hemingway, and Faulkner. (B)*
202 **African-American Literature I** (3) Survey of African-American authors from the antebellum era through the first quarter of the 20th century. (B)*
203 **African-American Literature II** (3) Continuation of LIT 202. Second quarter of the 20th century to the present. (B)*
204 **Black Women Writers of America** (3) Survey of black women writers of America. Examines themes and influences on American and African-American literary contexts.
230 **English Literature I** (3) A survey of English literature from Anglo-Saxon writing through the 18th century. (C)*
231 **English Literature II** (3) A survey of English literature of the 19th and 20th centuries. (D)*
250 **Victorian Attitudes** (3) A study of 19th-century attitudes toward social changes as expressed in art, architecture, literature, and nonfiction prose.
265 **Literature and Psychology** (3) An examination of the relationships between literature and psychology, with readings from drama (Shakespeare, Ibsen, and Albee), poetry (Poe, Browning, and Eliot), and fiction (Tolstoy, Joyce, Woolf, Mann, Kafka, and Faulkner). (E)*
269 **The Literature of Roguery** (3) A historical study of the rogue in fiction with emphasis on the satiric view of society. Among writers studied are Defoe, Thackeray, Donleavey, and Kerouac. (E)*
#270 **Urbanism and Modern Imagination** (3) Covers a variety of responses of contemporary writers, artists, and planners to the rise of the modern city. (E)*
271 **New Drama** (3) This course offers a selective survey of American and British drama since 1970. The playwrights studied will be drawn from a wide and expanding group, including Sam Shepard, David Rabe, Lanford Wilson, Tom Stoppard, Peter Shaffer, Caryl Churchill, and others. (E)*
272 **New Fiction** (3) Fiction published in the last 10 years. (E)*
274 **Feminist Poetry** (3) A study of poetry espousing the feminist cause and exploring the feminist response. Techniques and attitudes of such poets as Plath, Sexton, Rich, Morgan, Wakoski, and Kumin. (E)*
295 **Historical Context** (3) A study of a representative number of literary texts and the ways they interact historically, socially, intellectually, and politically with their own cultures as well as with the culture of the 20th-century reader. Literary and nonliterary texts will be studied as indicators of cultural and discursive shifts from one historical moment to another.
296 **Theory, Meaning, Value** (3) An introduction to the different theoretical positions that condition the ways in which we read a text and assign meaning to it.
297 **Themes in Contemporary Literature** (3) Literary topic or theme in contemporary American, English, or world literature to be announced each time the course is offered. (E)*
300 **Colonial and Revolutionary American Literature** (3) Writers of Colonial and Revolutionary America. (A)*
302 **Development of the American Novel** (3) Beginnings of the American novel to Frank Norris. (A)*
303 **Introduction to Multiethnic American Literature** (3) American ethnic, racial, and national groups in American literature and the contributions of creative literary artists representing these cultures. (E)*
304 **American Jewish Novel** (3) A study of major American Jewish novelists: Cahan, Singer, Roth, Potok, Bellow, Malamud, Wallant, and Wiesel. No knowledge of Yiddish or Hebrew necessary. (B)*
305 **Modern American Drama** (3) American drama from the early 1900's to the present, with emphasis on the development of the American theater as seen in such major dramatists as O'Neill, Odets, Wilder, Miller, Williams, and Albee. (B)*
306 **Modern American Novel** (3) The novel in America from Dreiser to the present. (B)*
307 **Modern American Poetry** (3) Major 20th-century American poets. (B)*
308 **The Sin of Success** (3) An investigation of the rise of democratic capitalism in America from Biblical influences in colonial times to the beginnings of the merchant class and the fall of modern "big business." A study of the entrepreneur and the "robber baron," the success ethic, and morality in the large corporation through history, economics, and literature.
#309 **Martin Luther King** (3) Examines and analyzes the writings of Dr. King and their relationship to the themes he pursued and the leadership role he achieved.
335 **Shakespeare I** (3) Reading, analysis, and discussion of selected histories and tragedies. Discussion of critical approaches to the plays and of the historical and intellectual climate of the times. (C)*
336 **Shakespeare II** (3) Reading, analysis, and discussion of selected comedies and nondramatic poems. Discussion of critical approaches to the works and of the historical and intellectual climate of the times. Either LIT 335 or 336 may be taken first. (C)*
337 **Literature of the Enlightenment** (3) A critical consideration of the 18th-century writers, exclusive of the dramatists. (C)*
338 **Restoration and 18th-Century Drama** (3) The drama from the reopening of the theaters in 1660 to 1800. (C)*
339 **18th-Century British Novel** (3) The British novel from Defoe to Austen. (D)*
340 **The Romantic Movement** (3) Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries in the light of social background and critical doctrine. (D)*
341 **19th-Century British Novel** (3) The British novel from Austin to Hardy. (D)*
342 **Victorian Literature** (3) Victorian thought and culture in poetry and nonfiction prose. (D)*
343 **Modern British Drama** (3) British drama from Wilde to the present, with emphasis on the rebirth of the British drama and its major writers. (D)*
344 **Modern British Novel** (3) The novel in England from Conrad to the present. (D)*
345 **Modern British Poetry** (3) Major 20th-century British poets. (D)*
352 **Literature for Young Children** (3) A critical study of the literature for young children for prospective specialists in early childhood. PREREQ: LIT 165 or equivalent.
364 **Modern Irish Literature** (3) Major literary writers of Ireland from 1840 to the present: George Moore, Synge, Yeats, Joyce, Shaw, O'Casey, Beckett, Behan, and Seamus Heaney. (D)*
365 **Short Fiction** (3) Analysis and intepretation of short fiction. (E)*
366 **Criticism** (3) A study of the theories of classical antiquity, England, and the United States, with emphasis on the relevance of these theories to English and American literature of the moment. (E)*
369 **The Modern Greek Experience** (3) The Greek heritage and its impact on the Greek-American writer and the Greek writer in exile (Petrakis, Gage, Haviaras, Kazantzakis, Cavafy, Seferis, and Ritsos).
395 **Children's Literature** (3) A critical study of literature for children, setting standards for evaluation and appreciation. PREREQ: LIT 165 or equivalent.
◆ 400 **Literature Seminar** (3) Required for English majors in the junior or senior year. Topics offered periodically: Beckett/Joyce, Byron, Dickens, Donne, Fitzgerald, Shaw, Greek Comedy, Greek Tragedy, Hawthorne, Homer, Resistance Poetry, Shakespeare's Major Tragedies, and Thomas Hardy.
430 **Old English Language and Literature** (3) An introductory study of the language (450-1150 A.D.) through a reading of religious and secular poetry and prose. (C)*
431 **Middle English Language and Literature** (3) An introductory study of the language (1150-1450 A.D.) through a reading of selected literary texts. (C)*
432 **English Drama to 1642** (3) English drama from the early liturgical tropes to 1642, exclusive of Shakespeare. (C)*
434 **Renaissance Poetry and Prose** (3) Poetry and prose of the 16th and early 17th centuries. (C)*
435 **Chaucer** (3) An interpretation of *Canterbury Tales* and *Troilus and Criseyde*. (C)*
437 **Spenser** (3) A study of the *The Faerie Queene* and shorter poems. (C)*
440 **Milton** (3) A survey of his major poetry and prose works. (C)*

The English department accepts certain humanities courses as major electives. Consult the *Handbook for English Majors* for a list of approved humanities courses.

JOURNALISM

Symbol: JRN

200 **Communications Media** (3) An introduction to the media of communications, emphasizing the development and characteristics of print and electronic media forms and their impact on American society.
225 **Newswriting** (3) A course designed to develop proficiency in the writing of news stories

★ Approved distributive requirement course.
* See the department handbook for group descriptions
# Approved interdisciplinary course.
◆ This course may be taken again for credit.

for daily and weekly newspapers. News values, the structure and style of news, and the preparation of copy in accordance with professional standards will be stressed.
226 News Reporting (3) Instruction and practice in basic news reporting techniques coupled with an introduction to newspaper feature writing. Outside assignments will include coverage of speeches, local government meetings, and the courts. PREREQ: JRN 225 or equivalent.
250 News Editing (3) A course designed to acquaint students with the skills involved in the preparation of copy for publication in newspapers and magazines. Instruction and practice in the mechanics of copy editing, headline writing, layout, and photo editing. PREREQ: JRN 225 or equivalent.
312 Sports Reporting and Writing (3) Instruction and practice in basic sports reporting techniques, including live-event coverage and feature writing, as well as an introduction to routine duties associated with working on the sports desk. PREREQ: JRN 225 or equivalent.
315 Magazine Article Writing (3) Practical instruction in the skills required for successful freelance magazine writing with emphasis on research, interviewing, writing techniques, and marketing. Students will write and submit for publication short features and a full-length magazine article. PREREQ: JRN 225 or equivalent.
325 History of Journalism (3) A historical survey of the American press from Colonial times to the present, with special emphasis on the continuing struggle for press freedom and the new journalistic environment created by the emergence of mass media.
355 Public Relations Principles (3) An introduction to the role of the public relations practitioner in the formation of public opinion. Communications theory will be combined with specific techniques for working with the press, producing printed material and conducting special events. PREREQ: JRN 225 or equivalent.
411 Journalism Practicum (3) One semester of supervised experience as a member of the editorial staff of the University's student newspaper. See journalism coordinator for specific requirements. PREREQ: JRN 225 *and* either JRN 226 or JRN 250.

CREATIVE WRITING
Symbol: CRW

201 Introduction to Creative Writing (3) Introduction to the craft of writing poetry and fiction. Basic discussion of terms, strategies, and professional models in each genre. Practice in writing and critiquing each genre.
202-203 Creative Writing I-II (3) (3) Writing experience in the crafts of fiction, poetry, nonfiction, and drama.
301-302 Poetry Workshop I-II (3) (3) The theory and practice of poetry and the exploration of verse forms. Practice in critical and interpretative analysis of poems written by fellow students and professional poets.
303-304 Short Story Workshop I-II (3) (3) Crafting the modern short story with reference to American and British models. The significance of setting, atmosphere, characterization, and theme. Discussion and some exploration of experimental ideas in the genre.
305 Essay Workshop (3) Practice in writing the essay. Conventions and techniques of this literary form as it appears in commercial and quality magazines.
307 Playwriting Workshop (3) Writing the play: possibilities and limitations of the stage. Attention to sets and costuming where relevant. Characterization by action and dialogue. Problems of establishing motivation. The play's totality in theme, character, and action. Informal readings of student work.
◆ 400 Writing Seminar (3) Special topics, such as fantasy, science fiction, longer prose works, or the antistory. To be announced.
490-491 Writing Seminar in the Novel I-II (3) (3) A course in the writing and preparing of book-length manuscripts (novel, novella, and the "nonfictional" novel) with the intention of submission for publication. Also includes coverage of fictional aspects and techniques used in writing memoirs, biography, and current history.

FILM THEORY AND CRITICISM
Symbol: FLM

200 Introduction to Film (3) A critical and analytical approach to world cinema covering film theory and the major film movements (Soviet Realism, German Expressionism, Italian Neo-Realism, French New Wave, Cinema Nuovo, New German Cinema, and Surrealism) from the beginning to present (E)*
201 American Film (3) The function of cinema in contemporary society as a socio-cultural, economic and political object, as seen through critical analysis of American films. (E)*
300 Private Screening (1) Eight to 12 narrative film classics per semester on a specific topic or theme.
301 Documentary Film (3) Understanding and enjoying the social, philosophic, economic, and political aspects of documentary film. (E)*

COMPARATIVE LITERATURE STUDIES
See course listings under Comparative Literature Studies, pages 80–81.

◆ This course may be taken again for credit.

Department of Foreign Languages

Ronald L. Gougher, *Chairperson*

Frederick Patton, *Assistant Chairperson*

PROFESSOR: Schlau

ASSOCIATE PROFESSORS: Braidotti, Escorcia, Gougher, Patton, Pauly, Williams

ASSISTANT PROFESSORS: Brown, Esplugas, Garcia-Barrio, Gilmour, Landwehr, Moscatelli, Seaver, Speh, Varricchio

INSTRUCTOR: Rosso

Programs Offered

BACHELOR OF ARTS: French, German, Latin, Russian, and Spanish

BACHELOR OF SCIENCE IN EDUCATION: French, German, Latin, Russian, and Spanish

The Instructional I Certificate in a foreign language qualifies the holder to teach his or her major language in the public schools (kindergarten through 12th grade) of Pennsylvania.

Minors: French, German, Italian, Latin, Russian, Spanish, and Translation

REQUIREMENTS COMMON TO THE B.A. PROGRAMS

1. General Requirements, see pages 35–39 — 51 semester hours
2. Major Language Courses — 33 semester hours

FRENCH – FRE 101-102* (or 111-112), 201-202 (or 211-212), 301, 302, 303, and 304. Additional courses to complete the 33 credit hours, taken under advisement.
GERMAN — GER 101-102*, 201-202, 221, 303 and/or 304, 305 and/or 306, 307 and/or 308. Additional courses to complete the 33 credits, taken under advisement.
LATIN — LAT 101-102*, 201, 202, 203, 303, and 406. Additional courses to complete the 33 credits, taken under advisement.
RUSSIAN — RUS 101-102*, 201-202, 301-302, 303-304, 305-306, 307-308, and 365. Additional courses to complete the 33 credits, taken under advisement.
SPANISH — SPA 101-102*, 201-202, 301-302, 315, 320 or 321, 330-331, 365, and any two 400-level courses. Additional courses to complete the 33 credits, taken under advisement.

3. Two cognate courses — 6 semester hours
   A. LIN 230
   B. History, political science, geography*
4. Demonstration of proficiency in a second language through the intermediate II level — 3 semester hours

* Foreign language majors receive no credit toward graduation, a major, or certification for 101 and/or 102 in their majors. If 101 and/or 102 in another language are taken as free electives, they will be credited towards graduation.

5. Electives 27-38 semester hours

The number of hours available depends on the student's level of second language proficiency. They may choose to apply some of these to additional advanced courses in their major area or to continue second or third language study.

REQUIREMENTS COMMON TO THE B.S. ED. PROGRAMS

1. General Requirements, see pages 35–39 51 semester hours
2. Foreign Language Concentration (specialized preparation) 33 semester hours
   FRENCH — FRE 101-102* (or 111-112), 201-202 (or 211-212) 301, 302, 303, and 304. Additional French courses to complete the 33 credits.
   GERMAN — GER 101-102*, 201-202, 303-304, 305-306, 307-308, and 365. Additional German courses to complete the 33 credits.
   LATIN — LAT 101-102*, 201, 202, 303, and 406. Additional Latin and Classical Language courses to complete the 33 credits.
   RUSSIAN — RUS 101-102*, 201-202, 301-302, 303-304, 305-306, 307-308, and 365.
   SPANISH — SPA 101-102*, 201-202, 301-302, 320 or 321, 330-331, and 365. Additional Spanish courses to complete the 33 credits.
3. Two cognate courses
   A. LIN 230 3 semester hours
   B. Area studies 3 semester hours
4. Student must complete professional education sequence 30 semester hours
5. Electives to complete 128 hours

The student is advised to use his or her electives in areas that will contribute to his or her profession.

All students majoring in foreign languages and preparing to teach must also complete LAN 301, credited to professional education.

Minor in Language 18 semester hours

Minors are available in French, German, Italian, Latin, Spanish, and Russian.

A. Language courses at levels 201 and 202 are required.
B. Courses at the 200, 300, and 400 levels in one language, taken under advisement. Courses in English are not acceptable.

Minor in Translation 18 semester hours

This program of study is open to any student who has a major or minor (or the equivalent) in a second language. A student must take the following courses: CLS 309, LAN 350, 351, 450, and 460, and LIN 230.

ADDITIONAL LANGUAGES

Greek, Italian, Portuguese
Courses in Greek, Italian, and Portuguese may be offered, but no major field is available.

Greek and Hebrew — Classical and New Testament
Elementary Greek I-II (GRE 101-102) and Intermediate Greek I-II (GRE 101-102). Part of Classical Language program.

Italian
Elementary Italian I-II (ITA 101-102), Intermediate Italian I-II (ITA 201-202), Advanced Italian I-II (ITA 301-302), Italian Culture (ITA 321), Italian Cinema (ITA 360), Survey of Italian Literature (ITA 400), Introduction to Dante, Petrarca, and Boccaccio (ITA 401), Contemporary Italian Literature (ITA 402), Independent Studies in Italian Language and Literature (ITA 410), Seminars in Italian (ITA 411-412).

Portuguese
Elementary Portuguese I-II (POR 101-102) and Intermediate Portuguese I-II (POR 201-202).

ADDITIONAL OFFERINGS— CONVERSATIONAL LANGUAGE COURSES

Selected critical or uncommonly taught languages such as Chinese, Japanese, Modern Greek, Modern Hebrew, Polish, Portuguese, and Serbo-Croatian, on a conversational basis only.

The Junior Year Abroad Program

The following courses in French are offered at the University of Montpellier, France, through the Junior Year Abroad Program sponsored by West Chester University. The program is designed to give persons interested in France a first-hand acquaintance with French life and enable them to achieve an active command of the language.

The program is open to any student enrolled at West Chester University who has completed the equivalent of two years of college French and is able to take lectures in French. During the time the student is enrolled in the program, he or she is a student of West Chester University and will receive a minimum of 30 credits for a full, two semesters of University work after successful completion of the year abroad program of study. Each course runs for two semesters and is conducted entirely in French by French professors. Other types of programs can be arranged for nonlanguage majors.

Montpellier Course Offerings

Advanced Grammar and Composition (FRE 361-62)
Advanced French Conversation (FRE 363-64)
Phonetics and Translation (FRE 365-66)
Contemporary French Civilization (FRE 367-68)
Literary Studies (FRE 369-70)

Foreign Language Testing and Placement

The Department of Foreign Languages provides a testing service for students entering the University. Based on the results of the tests given and an analysis of past experience, the Department of Foreign Languages will suggest the level of language a student should enter. After taking part in any given course for a short period of time, a student's placement could be changed if consultation between the student and an adviser results in a decision to change the placement. The department reserves the right to withhold credit towards a degree for a course taken at a lower level than was recommended by the department.

If a student wishes to take an exam to complete the language requirement or receive credit for a course, he or she must take a special exam other than those given for placement. Arrangements can be made with the chairperson of the Department of Foreign Languages.

* Foreign language majors receive no credit toward graduation, a major, or certification for 101 and/or 102 in their majors. If 101 and/or 102 in another language are taken as free electives, they will be credited towards graduation.

COURSE DESCRIPTIONS
FRENCH

Symbol: FRE

101-102 Elementary French I-II (Traditional) (3) (3) Fundamentals of French grammar, syntax, and pronunciation. All four skills (listening, speaking, reading, and writing) are taught concomitantly. Taught in French. Language laboratory work required.

111-112 Elementary French I-II (Intensive) (4) (4) For linguistically talented and motivated beginners. Course meets once in plenary session and three times in small groups. All four skills (listening, speaking, reading, and writing) are taught concomitantly. Language laboratory work required.

200 Intermediate Research (1) Special studies in French for studio art majors. Approval of department required.

201-202 Intermediate French I-II (Traditional) (3) (3) Review of grammar and syntax. Readings in French literature as a basis for class discussion and practice in composition. Language laboratory drill. PREREQ: FRE 102 or equivalent.

211-212 Intermediate French I-II (Intensive) (4) (4) Continuation of intensive first year. Review of French grammar and survey of contemporary French culture. Self-expression is developed through compositions and discussion on assigned topics. Language laboratory work required. PREREQ: FRE 112 or equivalent.

301 Advanced Grammar and Stylistics (3) The more complex grammatical and syntactical structures of the language, with particular attention to stylistics. Practice in the writing of compositions on a more sophisticated and advanced level with emphasis on correct usage. Work in language laboratory required. PREREQ: FRE 202 or placement. Offered spring semester only.

302 Advanced Oral French and Phonetics (3) Intensive practice in spoken French to develop skills in pronunciation and in listening comprehension. Introduction to French phonetics. PREREQ: FRE 202 or placement.

303 French Civilization (3) (In French) A survey of the social, political, economic, and educational structures of France, along with an introduction to the artistic contributions of the French, particularly in the 20th century. PREREQ: FRE 202 or placement.

304 Readings in French Literature (3) The reading and analysis of representative selections of French prose (fiction and nonfiction), poetry, essays, and plays. PREREQ: FRE 202 or placement.

401 Commercial French (3) A study of the French economic and business systems, and extensive practice in using forms and expressions frequently used in French business correspondence.

409 Women and Men in French Literature (3) (In English) Works by women and men novelists, poets, or dramatists that present striking images of love and conflict between the sexes. Also a women's studies course.

410 French Theater to 1900: In Context (3) A study of the French theater from its beginnings to the 19th century in the contexts of their times. Reading and analysis of representive plays from the various periods.

411 Modern French Literature in Context (3) A study of the evolution of modern literary genres, beginning with the revolt of the generation of 1900, through Dada and Surrealism and the writers of the absurd to the present.

412 Narrative Prose (3) An examination of the evolution of French prose in the "nouvelle," the "conte," the "récit" and the novel from their earliest beginnings to the present.

413 French Poetry (3) A history of French poetry and a study of its versification. Practice in the recitation of French poems and close textual analysis, and discussion of selected works.

◆ **420-421-422 Topics in French Literature** (3) (3) (3) Each topics course provides an in-depth study of a significant aspect of French culture, art, or literature, its history and influences, and/or its principal exponents, creative artists, and advocates. Topics will be announced annually by the French faculty.

Offerings in English (EFR): Interdisciplinary and Culture-Cluster Courses

■ # **EFR 220 French Civilization** (3) (In English) A study of France's political and educational systems and economic and religious institutions with emphasis on contemporary aspects.

FRENCH JUNIOR YEAR ABROAD PROGRAM

361-62	Advanced French Grammar and Composition III, IV (3) (3)
363-64	Advanced French Conversation I, II (3) (3)
365-66	French Phonetics and Translation I, II (3) (3)
367-68	Contemporary French Civilization I, II (3) (3)
◆ 369-70	French Literary Studies I, II (3) (3)

GERMAN

Symbol: GER

101-102 Elementary German I-II (3) (3) Fundamentals of German grammar, syntax, and pronunciation. Introduction to German culture through easy-reading texts. The audio-lingual method is employed. Language laboratory drill is required.

200 Intermediate Research (1) Special studies in German for studio art majors. Approval of department required.

201-202 Intermediate German I-II (3) (3) Review of grammar and syntax. Readings in German literature as a basis for class discussion in German and practice in composition. Language laboratory drill required for remedial work only. PREREQ: GER 102 or equivalent.

NOTE: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

210 German for Business (1) Intensive practice in writing business correspondence, job applications, and discussions of business practices in Germany.

211 German for Science (1) Study of basic vocabulary for reading documents related to various scientific fields. Readings in individual fields of endeavor.

212 German for Travel (1) Study of major cities and cultural sites in Germany. Concentration on contemporary information and travel.

#221 German Civilization (3) (In German) An analysis of the major contributions of German civilization to western culture in the areas of art, music, science, and literature. PREREQ: GER 202 or equivalent.

303-304 Advanced German Grammar and Composition I-II (3) (3) The more complex grammatical and syntactical structures of the language with particular attention to stylistics. Practice in writing compositions on a more advanced level with emphasis on correct usage. PREREQ: GER 202 or equivalent.

305 Survey of German Literature I (3) German literature from its earliest beginnings to 1800. PREREQ: GER 202 or equivalent.

306 Survey of German Literature II (3) German literature from 1800 to the present. PREREQ: GER 202 or equivalent.

307-308 Advanced Oral German I-II (3) (3) Intensive drill in the oral use of the language to develop proficiency in listening comprehension and speaking. PREREQ: GER 203 or equivalent.

365 German Phonetics (3) Description and practice in the sounds of the German language and its major dialectical differences. Comparative analysis with English. PREREQ: LIN 230.

400 20th-Century German Literature in Translation (3) (In English) A study of selected novels, short stories, and plays from the German literature of the 20th century. An introduction to some of the modern writers of the German-speaking world from the perspective of the social and political developments in modern Germany.

401 The Age of Goethe (3) German literary doctrines and masterpieces of the periods of Enlightenment, Storm and Stress, and Classicism. PREREQ: GER 202 or equivalent.

402 Contemporary German Literature (3) Works of the principal German writers of the 20th century. PREREQ: GER 202 or equivalent.

406 German Literature in the 19th Century (3) German realism of the 19th Century. PREREQ: GER 206 or equivalent.

407 German Lyric Poetry (3) Modern German poetry of pre- and post-World War II. PREREQ: GER 206 or equivalent.

409 German Literature of the Romantic Period (3) PREREQ: GER 206 or equivalent.

◆ **410 Independent Studies in German Language and Literature** (3) Special topics for advanced students only. PREREQ: Permission of instructor.

◆ **411 Seminar in German** (3) Independent study and research for upper-division students. Topics announced annually by the German faculty. PREREQ: Permission of instructor.

◆ **412 Seminar in German** (3) Independent study and research for upper-division students. Topic announced annually by the German faculty. PREREQ: Permission of instructor.

Offerings in English (EFR): Interdisciplinary and Culture-Cluster Courses

■ **#EGE 222 German Civilization** (3) An analysis of the major contributions of German civiliza-

◆ This course may be taken again for credit
■ Culture Cluster
Approved interdisciplinary course.

tion to western culture in the areas of art, music, science, and literature. No knowledge of German required.

■ #EGE 323 **Austrian Civilization 1848-1938** An interdisciplinary study of Austrian civilization, focusing on Vienna 1848-1938. The relationship of selected cultural and intellectual developments to their political and social contexts. This course employs the perspective of many disciplines but is specifically concerned with the humanities and visual arts.

GREEK

Symbol: GRE

101-102 **Elementary Greek I-II** (3) (3) Forms, grammar, and idioms of Attic and Koine Greek. Readings in Septuagint and New Testament Greek.

201 **Intermediate Greek I** (3) Readings in Socratic dialogues of Plato.

202 **Intermediate Greek II** (3) Homeric prosody and grammar. Reading of selected portions of the Homeric Poems.

◆ 301-302 **Greek Reading I-II** (3) (3) Readings in prose and verse. Authors selected usually by genre.

HEBREW

Symbol: HEB

101-102 **Elementary Biblical Hebrew I-II** (3) (3) Forms, grammar, and idioms of Biblical Hebrew. Selected readings.

201-202 **Intermediate Biblical Hebrew I-II** (3) (3) Readings in the prose and poetic document of the *Biblia Hebraica*.

ITALIAN

Symbol: ITA

101-102 **Elementary Italian I-II** (3) (3) Intensive drill, in class and in the language laboratory, with pronunciation, intonation, and basic linguistic patterns. Introduction to Italian culture through basic dialogues and easy-reading texts.

201-202 **Intermediate Italian I-II** (3) (3) Review of Italian grammar and syntax. Introduction to Italian literature through short readings of intermediate difficulty. Composition and conversation in Italian based on reading assignments. Language laboratory for remedial drill. PREREQ: ITA 102 or equivalent.

301-302 **Advanced Italian Grammar and Conversation I-II** (3) (3) Review and mastery of Italian grammar, with special emphasis on syntactic structure and stylistics, along with intensive oral drills to develop proficiency in listening comprehension and speaking ability.

304 **Advanced Oral Italian** (3) Theoretical and practical approach to phonology, phonetics, and basic self-expression in the Italian language.

321 **Italian Culture** (3) An overview of Italian geography, history, and regional cultures, along with its literary, philosophical, scientific, and artistic manifestations and contributions to the world.

360 **Italian Cinema** (3) A history of Italian cinema, as seen through representative works of each period/movement.

400 **Survey of Italian Literature** (3) High points in Italian literature, touching upon the most important writers from the beginning to the present day.

401 **Introduction to Dante, Petrarca, and Boccaccio** (3) A general discussion on the importance and influence of these writers on Italian and European literature and thought, as seen through some of their representative works.

402 **Contemporary Italian Literature** (3) A survey of contemporary Italian authors through some representative selections of their works.

◆ 410 **Independent Studies in Italian Language and Literature** (3) Special topics for advanced students only. PREREQ: Permission of instructor.

◆ 411 **Seminar in Italian I** (3) Independent study and research for upper-division students. Topics announced annually by the Italian faculty. PREREQ: Permission of instructor.

◆ 412 **Seminar in Italian II** (3) Independent study and research for upper-division students. Topics announced annually by the Italian faculty. PREREQ: Permission of instructor.

EIT 221 **Italian Culture** (3) An overview of Italian geography, history, and regional cultures, along with its literary, philosophical, scientific, and artistic manifestations and contributions to the world.

EIT 260 **Italian Cinema (in English)** (3) A history of Italian cinema, as seen through representative works of each period/movement.

LATIN

Symbol: LAT

101-102 **Elementary Latin I-II** (3) (3) Forms, syntax, and idioms of classical Latin. Selected readings.

201 **Cicero** (3) Selections from the orations, letters, and essays. PREREQ: LAT 101 and 102, or two years of secondary school Latin.

202 **Vergil** (3) Reading and analysis of celebrated portions of the *Aeneid*. The nature of Latin epic poetry. PREREQ: LAT 201 or three years of secondary school Latin.

NOTE: LAT 202 or four years of secondary school Latin is a prerequisite for all following courses in Latin.

301 **Teaching of Latin** (3) Introduction to the problems, methods, and materials in the teaching of Latin.

302 **The Latin Lyric Poets** (3) Latin lyric poetry through readings in Catullus, the Odes, and Epodes of Horace. Practice in the composition of lyric poetry.

303 **Advanced Latin Prose Composition** (3) Required of Latin majors; open to other students accepted by the instructor. The complex syntactical structures of Latin of classical style. Translations of English into classical Latin.

304 **The Latin Elegiac Poets** (3) Latin elegiac poetry through readings in Ovid, Tibullus, Lygdamus, Sulpicia, and Propertius. Practice in the composition of elegiac poetry.

◆ 305 **Reading Course in Latin** (3) Open to Latin majors only. Area and content to be determined by the student's needs.

306 **Roman Historians** (3) Introduction to Roman historiography. Readings in Livy, Sallust, and Tacitus.

401 **Roman Drama** (3) Origins and development of Roman drama. Selected plays of Plautus, Terence, and Seneca.

402 **Roman Philosophy** (3) Introduction to Greek and Roman philosophy. Readings in Cicero, "Tusculan Disputations," and Lucretius, "De Rerum Natura."

403 **Roman Satire** (3) Origins and development of Roman satire. Readings in Horace, Persius, and Juvenal.

404 **The Latin Novel** (3) Readings in Petronius, *Satyricon*, and Apuleius, *The Golden Ass*. Lectures and discussions of the emergence of the novel as a literary form.

405 **Medieval Latin** (3) Prose and poetry from the fourth to the 17th centuries.

406 **Latin Tutorial Course** (3) Required of majors in Latin or Classics; open to other students accepted by the instructor. Introduction to the history of the alphabet; principles of historical and comparative linguistics, especially as applied to Greek and Latin; and history of the Latin language as seen in ancient authors and inscriptions.

◆ 410 **Independent Studies in Latin Language and Literature** (3) Special topics for advanced students only. PREREQ: Permission of instructor.

◆ 411 **Seminar in Latin** (3) Independent study and research for upper-division students. Topics announced annually by the Latin faculty. PREREQ: Permission of instructor.

◆ 412 **Seminar in Latin** (3) Independent study and research for upper-division students. Topics announced annually by the Latin faculty. PREREQ: Permission of instructor.

PORTUGUESE

Symbol: POR

101-102 **Elementary Portuguese I-II** (3) (3) Fundamentals of Portuguese grammar, syntax, and pronunciation. Introduction to Brazilian heritage and culture through graded reading selections.

201-202 **Intermediate Portuguese I-II** (3) (3) Review and continuation of basic Portuguese with emphasis on vocabulary expansion and cultural insights through increased reading. Introduction to selected Portuguese and Brazilian authors. PREREQ: POR 102.

RUSSIAN

Symbol: RUS

101-102 **Elementary Russian I-II** (3) (3) Intensive drill in pronunciation, intonation, and basic linguistic patterns to develop fundamental communicative skills. Extensive language laboratory work is essential.

200 **Intermediate Research** (1) Special studies in Russian for studio art majors. Approval of department required.

201-202 **Intermediate Russian I-II** (3) (3) Reinforcement and refinement of communicative skills through the continuing study and review of grammatical structures. Composition and conversation based on writings of intermediate difficulty by Soviet writers. Students majoring in the sciences or mathematics may elect readings pertaining to the scientific field in the second semester. Extensive language laboratory work is essential. PREREQ: RUS 102.

NOTE: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

301-302 **Advanced Russian Grammar and Composition I-II** (3) (3) The more complex grammatical and syntactical structures of the language, with particular attention to stylistics. Practice in writing compositions on a more advanced level, with emphasis on current usage. Regular use of the tape program is essential. PREREQ: RUS 202 or equivalent.

303-304 **Advanced Readings in Russian Literature I-II** (3) (3) Works of Russian and Soviet literature are read and analyzed. PREREQ: RUS 202 or equivalent.

■ Culture Cluster
Approved interdisciplinary course.
◆ This course may be taken again for credit.

307-308 Advanced Oral Russian I-II (3) (3) Intensive drill in the oral use of the language to develop proficiency in listening comprehension and speaking. Regular use of the tape program is essential. PREREQ: RUS 203 or equivalent.
305-306 Russian Civilization I-II (3) (3) (In Russian) A study of the cultural, philosophical, religious, and artistic contributions of Russia. PREREQ: RUS 202 or equivalent.
310 Russian Literature in Translation (3) Survey of Russian literature from its origin to the present. All works read in English. No knowledge of Russian required.
365 Russian Phonetics (3) An overview of Russian phonetics, morphophonemics, and intonation patterns. Dialects and varieties of Russian. Phonetics and intonation practice in the language laboratory. PREREQ: LIN 230.
401 The Russian Novel (3) The Russian novel and literary trends of the 19th and 20th centuries. PREREQ: RUS 205 or equivalent.
402 The Russian Drama (3) Works of the major dramatists of the 19th and 20th centuries. PREREQ: RUS 205 or equivalent.
403 Russian Poetry of the 20th Century (3) A study of the principal Russian poets of the 20th century. PREREQ: RUS 205 or equivalent.
◆ 410 Independent Studies in Russian Language and Literature (3) Special topics for advanced students only. PREREQ: Permission of instructor.
◆ 411 Seminar in Russian (3) Independent study and research for upper-division students. Topics announced annually by the Russian faculty. PREREQ: Permission of instructor.
◆ 412 Seminar in Russian (3) Independent study and research for upper-division students. Topics announced annually by the Russian faculty. PREREQ: Permission of instructor.

Offerings in English (ERU): Interdisciplinary and Culture-Cluster Courses
■ # ERU 209 Soviet Russian Culture (3) (In English) An interdisciplinary course designed to acquaint students with Russian culture and life in the Soviet Union today. No knowledge of Russian required.

SPANISH

Symbol: SPA

101-102 Elementary Spanish I-II (3) (3) Fundamentals of Spanish grammar, syntax, and pronunciation from the oral-aural point of view. Introduction to Spanish culture through easy-reading texts.
200 Intermediate Research (1) Special studies in Spanish for studio art majors. Approval of department required.
201-202 Intermediate Spanish I-II (3) (3) Review of Spanish grammar and syntax. Readings in Spanish literature as a basis for class discussion in Spanish and practice in composition. Language laboratory drill recommended for remedial work where needed. PREREQ: SPA 102 or equivalent.

NOTE: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

301-302 Advanced Spanish Grammar and Conversation I-II (3) (3) Review and mastery of Spanish grammar, with special emphasis on syntactic structures and stylistics, along with intensive oral drills to develop proficiency in listening comprehension and speaking ability. PREREQ: SPA 202 or equivalent.
303 Commercial Spanish (3) A practical course in learning how to write business letters, apply for jobs, fill orders, and perform other commercial transactions in Spanish. PREREQ: SPA 301-302 or permission of instructor.
304 Spanish for the Professional (3) Spanish for the professional in public service fields such as law, safety, medicine, and government. Emphasis on oral communication in specific, real-life situations. Translation of forms and documents and the writing of professional communications. PREREQ: SPA 301-302 or permission of instructor.
315 Advanced Readings in Spanish (3) Introductory readings of Spanish and Spanish-American works from a variety of sources, including literary texts. Special attention to improvement of grammar, and oral and written expression. PREREQ: SPA 301-302 or permission of instructor.
320 Civilization of Spain (3) Major contributions of Spain. Cultural, geographic, literary, philosophical, and artistic manifestations of the Hispanic world. PREREQ: SPA 301-302 or permission of instructor.
321 Civilization of Spanish America (3) Cultural, geographic, literary, philosophical, and artistic manifestations of the Hispanic-American world. PREREQ: SPA 301-302 or permission of instructor.
323 Language and Culture of Puerto Rico (3) (In Spanish) A study of the language and culture of Puerto Rico. Includes geography, history, immigration, and emigration. Emphasis on Puerto Rican Spanish language patterns and literature. Study of the mid-Atlantic Puerto Rican community. PREREQ: SPA 301-202 or permission of instructor.
330 Survey of Spanish Literature (3) Representative selections of Spanish literature from its beginning to the present. PREREQ: SPA 315 or permission of instructor.
331 Survey of Spanish-American Literature (3) Representative selections of Spanish-American literature from 1492 to the present. PREREQ: SPA 315 or permission of instructor.
365 Spanish Phonetics (3) Description and practice in the sounds of the Spanish language and its major dilectical differences. Comparative analysis with English. PREREQ: LIN 230 and SPA 302.
400 Spanish Literature to 1550 (3) Spanish literature of the Middle Ages and Renaissance, including epic, early lyric, prose, and theater. PREREQ: SPA 330 or permission of instructor.
401 Spanish Literature of the Golden Age (3) Spanish literature of the 16th and 17th centuries: mysticism, drama, poetry, and the novel. PREREQ: SPA 330 or permission of instructor.
402 Spanish Drama of the Golden Age (3) Themes and traditions of the comedia. PREREQ: SPA 330 or permission of instructor.
404 Cervantes (3) Study of *Don Quixote* and Cervantes' contributions to world literature. PREREQ: SPA 330 or permission of instructor.
405 Modern Hispanic Literature (18th and 19th Centuries) (3) Spanish and Spanish-American thought, literature, and culture as revealed in outstanding works from the neo-Classical period to the end of the 19th century. PREREQ: SPA 330 or 331 or permission of instructor.
406 The Generation of 1898 (3) A reading and evaluation of the literary and philosophical contributions of writers such as Unamuno and Ortega y Gasset. PREREQ: SPA 330 or permission of instructor.
407 Spanish Literature Since the Civil War Period (3) Introduction to works that represent Spanish literature from the Civil War period to the present. Authors studied include Arrabal, Cela, Delibes, Garci Lorca, Goytisolo, Matute, Sender, and others. PREREQ: SPA 330 or permission of instructor.
408 Modern Hispanic Poetry (3) A survey of major authors and movements in Spanish and Spanish-American poetry of the 19th and 20th centuries. Authors include Vicente Aleixandre, Gustavo Adolfo Bécquer, Rubén Darío, José Espronceda, Federico García Lorca, Gabriela Mistral, and Pablo Neruda. Movements include Romanticism, Modernism, and the avant-garde. PREREQ: SPA 330 or 331 or permission of instructor.
409 Contemporary Spanish-American Literature (3) A study of major authors and literary movements in contemporary Spanish America, including magical realism in prose fiction, theater of the absurd, avant-garde poetry, and modern essays. PREREQ: SPA 331 or permission of instructor.
410 Contemporary Spanish-American Prose Fiction (3) A focus on 20th-century prose fiction in Spanish America. The works of narratists such as Borges, Carpentier, Cortázar, Fuentes, and García Márquez will be examined closely, in light of Spanish-American cultural and literary modalities. PREREQ: SPA 331 or permission of instructor.
411 Modern Spanish-American Theater (3) A study of the theater as a reflection of social realities including the theater of the absurd; the dynamic of play and audience. The Spanish-American stage will be analyzed through its cultural, historical, and religious contexts. PREREQ: SPA 331 or permission of instructor.
412 Literature of the Hispanic Caribbean (3) An analysis of the literature of the Hispanic Caribbean, placing it in its historical, geographical, and cultural context through a survey of major authors and movements. PREREQ: SPA 331 or permission of instructor.
413 Hispanic Women Writers (3) An examination of the tradition of women writers and their works in Spain and Spanish America from the 17th century to the present. Includes fiction, poetry, and theater. PREREQ: Spanish 330 or 331 or permission of instructor.
414 The Black in Spanish-American Literature (3) For undergraduates who are interested in the characterization of blacks in Spanish-American literature and the political and social context of their literary portrayal.
◆ 456-457 Hispanic Literature Seminar I-II (3) (3) Special topics for advanced students only, such as politics and literature in contemporary Latin America, the literature of discovery and conquest, the novel of the dictator, and Spanish literature during and after Franco. PREREQ: Permission of instructor.

Offerings in English (ESP): Interdisciplinary and Culture-Cluster Courses
■ # ESP 219 Culture and Civilization of Spain (3) A study of the origins and evolution of Spanish character, tradition, and thought. The interrelationship of its history and arts. The scope of its contribution to Western culture. No knowledge of Spanish is required.

◆ This course may be taken again for credit.
■ Culture Cluster
Approved interdisciplinary course.

■ # ESP 222 Culture and Civilization of Latin America (3) Cultural, geographic, literary, philosophical, and artistic manifestations of the Hispanic-American world. No knowledge of Spanish is required

■ ESP/CLS 311 Contemporary Latin American Narrative (3) An examination of Latin American narrative (short story, novella, novel, and testimonial literature). Spanish- and Portuguese-language writers from South and Central America, Mexico, and the Caribbean will be studied, from the period of magical realism (1950's and 1960's) through the present. They may include Isabel Allende, Jorge Amado, Miguel Angel Asturias, Jorge Luis Borges, Gabriel Garcia Márquez, Clarice Lispector, Elena Poniatowska, and Luis Rafael Sánchez.

#ESP 324 Language and Culture of Puerto Rico (3) A study of the language and culture of Puerto Rico. Includes geography, history, immigration, and emigration. Emphasis on Puerto Rican Spanish language patterns and literature. Study of the mid-Atlantic Puerto Rican community. No knowledge of Spanish is required.

#ESP 362 Beyond Columbus (3) The impact the discovery, conquest, and colonization of the New World had on Europe is seen through diverse sources in literature, history, the arts, and related disciplines. Topics include the trans-Atlantic exchange of ideas and cultures, indigenous religions, ethic of conquest, evangelization, cartography, colonial science, changing views of humanity, and nature. Course includes a field trip and guest lecturers.

ESP 403 Introduction to Cervantes and *Don Quixote* (3) Reading the full text of *Don Quixote*. Important chapters and topics will be analyzed. Special emphasis given to problems of translation. No knowledge of Spanish is required.

ADDITIONAL LANGUAGES

191-192 Critical Language I-II (3) (3) Self-instructional program in one of the seldom-taught languages: Arabic, Chinese, Dutch, Finnish, Gaelic, Japanese, Korean, Modern Greek, Modern Hebrew, Polish, Portuguese, Serbo-Croatian, Swedish, and Vietnamese. The student works with an integrated text and tape program, and a tutor. By permission of Department of Foreign Languages. Not for language requirement.

193-194 Critical Language III-IV (3) (3) Continuation of LAN 191-192.

COURSES COMMON TO ALL LANGUAGES

LAN 301 Teaching of Modern Languages: K-12 (3) Problems, methods, and materials of teaching second languages at all levels. Observation and participation in second-language classrooms. PREREQ: Completion of language courses through the advanced level and LIN 230.

LAN 303 Second Languages in the Elementary School (3) Techniques and materials used in teaching second languages in the elementary school. Practice in the application of these techniques and observation of foreign language classes. PREREQ: Completion of intermediate level in the chosen foreign language.

LAN 305 Introduction to Bilingual/Bicultural Education (3) Introduction to the history, philosophy, current status, and future directions of bilingual/bicultural education. Survey of materials, techniques, instructional processes, and instructional patterns. Overview of testing, placement, and pupil evaluation. PREREQ: Intermediate level proficiency in a second language and LIN 250 or equivalent.

LAN 310 Contemporary Literary Criticism (3) A survey of the major developments in European literary criticism during the 20th century with an emphasis on the developments of the last 20 years.

◆ LAN 411 Topical Seminar (3) Specialized studies in language and the teaching of foreign languages.

LIN 230 (also ENG 230) Introduction to Linguistics (3) See ENG 230.

LIN 250 Psycholinguistics (3) Introduction to the study of relationships between language, generative models, communication theory, and learning theory. Major emphasis on natural language development and bilingualism.

#LIN 330 (also PHI 330) Introduction to Meaning (3) See PHI 330.

LIN 360 (also PHI 360) Philosophy of Language (3) See PHI 360.

LIN 380 Language and Culture (3) Language as an aspect of culture, using linguistic-perceptual-cognitive categories; social and psychological aspects of language. PREREQ: LIN 230 or permission of instructor.

LIN 406 Meaning in Language (3) See PHI 406.

◆ LIN 411-412 Seminar in Linguistics (3) (3) Specialized studies in linguistics. Topics announced annually. PREREQ: LIN 230 or at least junior standing.

LIN 415 (also COM 415) General Semantics (3) See COM 415.

TRANSLATION COURSES

Symbol: LAN

250 The Art of Translation (3) Techniques of translating literary, journalistic, and technical and scientific texts. PREREQ: 202 or equivalent in a modern language.

350 Translation I (3) Introduction to translation as a profession. A survey of the history, literature, and theories of translation and of professional organizations and technical resources available to translators.

351 Translation II (3) Practical work in translating a variety of materials drawn from various fields, including literature, business, government, and the sciences.

450 Translation III (3) Practice translating more advanced materials with specialization in one or two subject areas.

460 Field Placement (3) Internship under faculty supervision in a translation agency, business firm, or other organization or institution that has substantial translation work as part of its operation.

◆ CLS 309 Literature Translation Workshop (3) A writing workshop on the theory and practice of literary translation.

■ Culture Cluster
◆ This course may be taken again for credit.
Approved interdisciplinary course.

Department of Geology and Astronomy

C. Gil Wiswall, *Chairperson*

PROFESSORS: Pritchard, Reed, Stolar

ASSOCIATE PROFESSORS: Ehleiter, Harber, Johnson, Smith, Wiswall

ASSISTANT PROFESSORS: Busch, Dyar, Srogi

The Department of Geology and Astronomy offers a Bachelor of Science in earth science with concentrations available in geology or astronomy; a Bachelor of Science in geology/chemistry; and, in cooperation with the School of Education, a Bachelor of Science in Education with an emphasis in earth and space science.

1. The B.S. in EARTH SCIENCE is a liberal arts program designed to prepare recipients for occupations in the earth sciences or for studies toward an advanced degree. The curriculum involves an overall science and mathematics exposure but allows for a greater concentration in one aspect of the earth or space sciences, such as the environment, applied geology, astronomy, or oceanography.
2. The B.S. in EDUCATION in EARTH SCIENCE is a professional degree program designed to prepare certified secondary school teachers of earth science. The curriculum involves an overall science exposure with a concentration in the earth sciences.
3. The B.S. in CHEMISTRY/GEOLOGY is a liberal arts program designed to prepare recipients for occupations in chemistry and/or geology as well as for studies toward an advanced degree. The curriculum involves a balanced exposure in chemistry and geology.

A cooperative five-year program with Pennsylvania State University leading to a B.S. from West Chester University in physics is available, as well as a B.S. in petroleum and natural gas engineering from Pennsylvania State University. For further information about this program, refer to the Physics and Pre-Engineering section of this catalog.

Regardless of which degree is pursued, all students must consult with their adviser regularly to avoid problems. Those in the B.S. in Education program will have a second adviser in the School of Education to help the student meet the secondary education requirements.

REQUIREMENTS COMMON TO ALL DEGREE PROGRAMS

1. General Requirements (see pages 35–39)	42 semester hours
2. Science Cognates	8 semester hours

CHE 103, CRL 103, and CSC 101 or 115
3. Earth Science Courses — 3 semester hours
ESS 101
4. A grade of C– or better must be achieved for all required courses within the department including the required earth science approved electives; the science cognates in physics, chemistry, and biology; and MAT 105, 110, and 121, and CSC 101 and 115.

BACHELOR OF SCIENCE — EARTH SCIENCE

1. Science Cognates — 24 semester hours
CHE 104; CRL 104; MAT 105 or 110, and 161 and 162; PHY 130 or 170, and 140 or 180
2. Earth Science Core Courses — 35-36 semester hours
ESS 111, 302, 305 or 420, 307, 330, 331 or 450, 336, 404, and 478
3. Electives — 13-15 semester hours
COM 101 and ENG 371 are strongly recommended.

BACHELOR OF SCIENCE — EARTH SCIENCE/GEOLOGY

1. Science Cognates — 24 semester hours
CHE 104; CRL 104; MAT 105 or 110, and 161 and 162; PHY 130 or 170, and 140 or 180
2. Earth Science Core Courses — 20-21 semester hours
ESL 201, and ESS 302, 305 or 420, 331 or 450, 404, and 478
3. Earth Science Approved Electives — 12 semester hours
4. Electives — 16-18 semester hours
COM 101 and ENG 371 are strongly recommended.

BACHELOR OF SCIENCE — EARTH SCIENCE/ASTRONOMY

1. Science Cognates — 24 semester hours
CHE 104; CRL 104; MAT 105 or 110, and 161 and 162; PHY 130 or 170, and 140 or 180
2. Earth Science Core Courses — 15 semester hours
ESL 201, and ESS 111, 355, 404, and 478
3. Specialized Courses — any two — 6 semester hours
ESS 293, 353, 354, 362, and 475
4. Other Courses — 17-18 semester hours
ESS 302, 305 or 420, 307, 331 or 450, and 478
5. Electives — 10-14 semester hours
COM 101 and ENG 371 are strongly recommended.

BACHELOR OF SCIENCE — CHEMISTRY/GEOLOGY

1. Science Cognates — 37 semester hours
CHE 104, 321, and 341 or 424; CRL 104, 321, and 341 or 424; MAT 105 or 110, 121, 161, and 162; and PHY 130 or 170, and 140 or 180
2. Earth Science Core Courses — 23 semester hours
ESL 327 and 329; ESS 302, 305, 310, 313, 404
3. Electives — 19 semester hours
COM 101 and ENG 371 are strongly recommended.

BACHELOR OF SCIENCE IN EDUCATION — EARTH AND SPACE SCIENCE

1. Secondary Education Requirements, including SCE 350 — 30 semester hours
2. Science Cognates — 22-23 semester hours
BIO 110; CHE 104; CRL 104; MAT 105 or 161 and 121; PHY 130 or 170; PHY 140 or 180
3. Earth Science Core Courses — 21 semester hours
ESL 201, ESS 111, 330, 332, 355, 370, and 371
4. Electives — 9 semester hours
Three courses from this group:
ESS 302 or 313, 420 or 450, 336 or 435, and ESS 343 or 331

Minor Programs

Students may choose to minor in any of the following programs. Courses are selected with the approval of the student's adviser.

1. Astronomy
ESS 111 plus four other astronomy courses, selected with the approval of the student's minor adviser

2. Earth Science
ESS 101 or 203, and 111, 330 and 340, plus one course in earth science, selected with the approval of the student's minor adviser. ESL 203 and 330 are optional.

3. Geology
ESS 101 or 203 plus four other geology courses selected with the approval of the student's minor adviser

Any of these minors may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

COURSE DESCRIPTIONS GEOLOGY AND ASTRONOMY

Symbol: ESS unless otherwise shown

★101 **Introduction to Geology (formerly called Earth Science)** (3) The earth's composition and history; the processes that occur on and within the earth. Two hours of lecture and two hours of lab.

#102 **Humans and the Environment** (3) A study of the ability of humans to survive and maintain their life quality, considering the limited resources and recycling capacity of planet Earth.

★111 **General Astronomy** (3) A descriptive course, including the composition and evolution of solar and stellar systems. Two hours of lecture and two hours of lab.

115 **Fundamental World Place Names** (1) A survey of major countries, capitals and principal cities, large rivers, water bodies, and geologically important physical features through map work and lecture.

ESL 151 **Graphic Geology I** (1) Introduction to the preparation and use of drawings in the geological sciences, including drawing tools and standards, contour maps, roadways, strike and dip of a plane, plots of a survey, and topographic maps.

ESL 201 **Fundamentals of Techniques in Geology** (3) An introduction to the basic methods of geologic data collection, analysis, and presentation; literature research; and report writing. One weekend field trip is required. PREREQ: ESS 101.

203 **Physical Geology** (3) The earth's composition (minerals and rocks) and earth processes (weathering, erosion, volcanism, and diastrophism). Three hours of lecture.

ESL 203 **Physical Geology Laboratory** (1) Two hours (required with lecture).

206 **Gemstones** (3) A survey of gem formation, identification, fashioning, and evaluation. For the general student. Demonstrations, specimens, and field trips complement lecture topics. No science background is assumed.

293 **Introduction to Space Science** (3) Formal and informal lectures and discussions. Use of current literature. In-depth study of a topic of the student's choice.

302 **Mineralogy** (4) Physico-chemical principles used in the classification, identification, and origin of minerals. Field examination of local minerals.

305 **Petrology** (4) Principles of rock origin identification and classification. Laboratory and field examination of rocks. PREREQ: ESS 302.

307 **Geology of the Solar System** (3) The geology, origin, evolution, and properties of planets,

★ Approved distributive requirement course.
Approved interdisciplinary course.

comets, asteroids, moons, and meteorites.

310 **Intermediate Mineralogy** (3) How the petrographic microscope and x-ray diffraction are used to identify minerals. PREREQ: One course in basic mineralogy (ESS 302).

313 **Geochemistry** (3) The chemistry of the earth and its relation to geologic processes.

323 **General Geologic Field Studies of Southeastern Pennsylvania** (3) Occurrence, relationships, and geologic history of the rocks, minerals, and soils of this area, studied at representative locations. PREREQ: ESS 302.

324 **History of the Earth Sciences** (3) An examination of the history of scientific thought and contributions in the area of the earth sciences. PREREQ: Completion of core requirements in science and mathematics.

326 **Economic Geology** (3) The origin, geologic and geographic distribution, limits, and production technology of mineral resources. PREREQ: ESS 101 or permission of instructor.

328 **Engineering Geology** (3) The application of geological factors into the planning and design of engineered construction, ground water extraction, and waste disposal. PREREQ: ESS 101 or permission of instructor.

ESL 327 **Electron Microscopy I** (3) A one-semester lecture/laboratory course in theory operation and applications of electron beam technology in scientific research. Course scheduled on student-demand basis.

ESL 329 **Electron Microscopy II** (3) A one-semester lecture/laboratory course in advanced theories of electron microscopy in scientific research. Emphasis on individual projects. PREREQ: ESS 327. Course scheduled on student-demand basis.

330 **Introduction to Oceanography** (3) A survey of our present knowledge of the waters and floors of the oceans.

ESL 330 **Introduction to Oceanography Laboratory** (1)

331 **Introduction to Paleontology** (3) Identification and study of common fossils in order to understand their life processes and geologic significance. PREREQ: One course in geology.

332 **Advanced Oceanography** (3) An advanced course in oceanography covering marine resources, oceanographic literature, animal-sediment relationships, field techniques, estuaries, salt marshes, sea level changes, and pollution. PREREQ: ESS 330.

336 **Environmental Geology** (3) The application of geological information to human problems encountered in natural phenomena, such as flooding, earthquakes, coastal hazards, and man-made concerns, including waste disposal, land use, and global change. PREREQ: ESS 101 or permission of instructor.

339 **Hydrology** (3) The factors that control the distribution, occurrence, and recoverability of groundwater; techniques for locating and estimating recoverable water; groundwater pollution and waste water disposal.

341 **Geology and Geography of Plants** (3) The study of paleo and modern spatial characteristics and distributions of vegetation and their relationship to the geologic, geographic, climatic, and human-induced features of the environment. PREREQ: ESS 101 or GEO 101.

342 **Geophysics** (3) Gravitational, magnetic, seismic (refraction and reflection), and electrical properties of rocks and minerals in the earth. Physical principles of the earth; geophysics in relation to economic deposits. PREREQ: PHY 140 or 180.

343 **Geomorphology I** (3) Constructional and degradational forces that have shaped present landforms and are constantly reshaping and modifying landforms. Interpretation of geologic and topographic maps; field studies. PREREQ: ESS 101 or GEO 101.

344 **Geomorphology II** (3) A continuation of the study of earth surface processes. Interpretation of topographic maps and air photos. PREREQ: ESS 343.

345 **Regional Geomorphology of North America** (3) A systematic analysis of surface configurations and landform regions of North America; the processes at work on these configurations in the past and at present; human relationships to these features and processes. PREREQ: ESS 344.

346 **Geology of Petroleum** (3) The geology, origin, occurrence, properties, development, and exploitation of petroleum and natural gas. Future energy demands also are explored. PREREQ: Permission of instructor.

353 **Nautical Astronomy (Celestial Navigation)** (3) Technical skills including celestial coordinates, principles of time, the navigational triangle, lines of position, and star identification. PREREQ: ESS 111.

ESL 353 **Nautical Astronomy Laboratory** (1) Observation will be taken in the real sky and with a water horizon, and data will be reduced to determine the position of the observer.

354 **Archeoastronomy** (3) Astronomical skills of the Babylonians, Egyptians, Greeks, Chinese, Maya, Incas, Aztecs, and the North American Indians. PREREQ: ESS 111 or permission of instructor.

355 **Intermediate Astronomy** (3) An analytical and qualitative analysis of selected astronomical phenomena. Topics include telescope optics (including photographic and photoelectric attachments), lunar and planetary orbits, stellar motions and magnitudes, galactic classifications, and distances. Two hours of lecture and two hours of lab. PREREQ: ESS 111.

362 **History of Astronomy** (3) Development of astronomical theories from the ancient Greeks until the 20th century. PREREQ: ESS 111.

370 **Meteorology I** (3) A study of the principles governing the earth's atmosphere and how these principles determine weather conditions.

371 **Meteorology II** (3) A continuation of the study of the principles governing the earth's atmosphere and how these principles determine weather conditions. PREREQ: ESS 370.

394 **Geology of the Northwestern National Parks** (4) Field course.

395 **Geology of the Southwestern National Parks** (4) Field course.

404 **Historical Geology** (3) The geologic history of the earth and the evidences for this history.

ESL 404 **Historical Geology Laboratory** (1) Two hours (required with lecture).

406 **Quaternary Geology** (3) An investigation of the most recent geologic period, including the records of climate change, geomorphology, glacial history, stratigraphy, sea level changes, and faunal evolution that have accompanied the continental glaciations of the last two million years. Includes spring break field trip.

408 **Field Geology I** (3) Practical experience in the techniques and tools of the field geologist. PREREQ: 305.

409 **Field Geology II** (3) Exploration techniques involving inference methods: applied geophysics, construction, and graphical representation of complex, three-dimensional structures.

418 **Structural Petrology** (3) Deformation mechanisms and rheology; the theory of strain, including formation and evolution of tectonic features.

420 **Structural Geology** (4) Determination of the sequential development and the forces involved in the various structural features of the earth. PREREQ: ESL 201, ESS 305.

425 **Tectonics** (3) To appreciate how the surface of the planet evolves; why things are where they are.

435 **Remote Sensing** (3) An introduction to the science and technology of remote sensing and the applications of remote sensing data to geology, oceanography, meteorology, and the environment. Includes a discussion of the history and principles of remote sensing; fundamentals of electromagnetic radiation; theory and types of active and passive remote sensing systems; fundamentals of image interpretation; digital analysis of LANDSAT and AVHRR data; operation of environmental satellites; and future imaging systems.

450 **Sedimentation and Stratigraphy** (4) Development of the relative geological time, methods, and techniques for the description and evaluation of the total environment of the time of the formation of stratified rock.

◆ 460 **Internship** (1-18) Work with industry, or local, state, or federal government agencies under faculty supervision.

475 **Introduction to the Planetarium** (3) Principles and use of the planetarium in a teaching situation. Specific projects are assigned. PREREQ: ESS 111.

◆ 478 **Earth Science Seminar** (3) Reports on special topics and current development.

◆ 480 **Special Problems** (1-3) Reports on special topics and current developments in the earth and space sciences. PREREQ: Permission of instructor.

490 **Fundamentals of Soil** (3) The properties of soils, edaphology, and pedology: chemical, physical, and biological factors. Soil genesis and classification.

◆ 491 **Independent Study** (1-3)

#IND 201 **Unified Science** (3) An interdisciplinary course dealing with methodologies used by all scientists; an analysis of the concepts that find expression in all of the biological and physical sciences.

#SCB 210 **The Origin of Life and the Universe** (3) An interdisciplinary course that presents the theory and evidence of the first three minutes of the universe and formation of the stars, galaxies, planets, organic molecules, and the genetic basis of organic evolution. PREREQ: High school or college courses in at least two sciences.

SCE 310 **Science for the Elementary Grades** (3) A course to prepare the elementary teacher for teaching science. Selected units or problems that cut across various fields of science. Methods and processes of science and available resources. PREREQ: Completion of science and mathematics general education requirements. Must reach junior status by the end of the previous semester.

SCE 350 **Science Education in the Secondary School** (3) Philosophy, objectives, and methods of teaching science. Practical experience provided. PREREQ: A major in liberal arts or secondary education (sciences).

SCE 370 **Science and Human Values** (3) A one-semester course illustrating the impact of science on human thought, values, and institutions. Ethical, sociological, and psychological aspects of science-mediated change are covered in depth.

◆ This course may be taken again for credit.
Approved interdisciplinary course.

Department of History

Ray Doyle, *Chairperson*
Marita Boes, *Assistant Chairperson*

PROFESSORS: Burgwyn, Dzamba, Foster, Heston, Johnson, Riley, Shur, Soldon, Swan, Turner, Webster, Young

ASSOCIATE PROFESSORS: Doyle, Peters

ASSISTANT PROFESSORS: Boes, Davidson, Hardy, Hewitt, Jones, Zimmerman

The student of history seeks to re-create the past (or, more precisely, as much of it as possible) in a rational manner, not only to explain and understand the past for its own sake, but also to identify our age with earlier times. The student is concerned with the origins, development, and relationships between past people and events and, from the multiplicity of credible and sometimes conflicting evidence, renders judgments on causation and consequences. He or she seeks to achieve a sense of the past. Among the careers open to history majors are the law, government service, teaching, research, journalism, and business. Indeed, a strong preparation in history can lead to possibilities in virtually every field of endeavor.

BACHELOR OF ARTS — HISTORY

1. General Requirements, see pages 35–39 — 51 semester hours
2. Foreign Language Requirement — 3-15 semester hours
3. History Concentration Requirements — 33 semester hours
   HIS 101 taken under general requirements; HIS 102, 151, and 152 (nine semester hours); HIS 300 (three semester hours)

   Group 1 — American History — 6 semester hours
   HIS 325, 344, 352, 354, 356, 357, 358, 359, 360, 361, 362, 364, 365, 366, 370, 373, 445, 451, 455, 458, 462, 474

   Group 2 — European History — 6 semester hours
   HIS 318, 319, 320, 322, 323, 324, 329, 330, 331, 333, 415, 416, 420, 421, 422, 423, 425, 426, 427, 435, 445, 447

   Group 3 — World and Regional History — 6 semester hours
   HIS 301, 302, 305, 306, 308, 311, 312, 315, 316, 317, 318, 348, 406, 407, 411, 412, 415

   History Electives — 3 semester hours
4. Cognate Courses — 12 semester hours
   Four cognate courses selected from literature, art, or philosophy
5. Additional free electives to complete 128 semester hours

BACHELOR OF SCIENCE IN EDUCATION — SOCIAL STUDIES

Concentration in History

Students interested in teaching secondary social studies may pursue concentrations in history while earning state certification in social studies and the Bachelor of Science degree. (See the description under "Social Studies: B.S. in Education," page 116, for common requirements.) In addition to the history concentration, the department offers concentrations in American culture, world cultures, and ethnic studies. In all concentrations, students must complete HIS 300, Varieties of History; other requirements vary according to the concentration.

History Minor

Students may obtain minor recognition on their transcript so that their concentrated choice of free electives will be recognized.

1. Required Courses — 6 semester hours
   One course among HIS 100, 101, or 102, and one course among HIS 150, 151, or 152
2. Electives — 12 semester hours
   Chosen under advisement from three groups: American, European, World and Regional History (six semester hours in one group; three semester hours in each of the others)

This minor may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

COURSE DESCRIPTIONS
HISTORY

Symbol: HIS unless otherwise shown

★ **101 History of Civilization I (3)** Man's cultural elements and social institutions in the West and the East from earliest times through the Renaissance. Offered every semester.

★ **102 History of Civilization II (3)** Developments in civilizations from 1500 to the present, with emphasis on Western civilization and its interrelationships with the non-Western world. Offered every semester.

126 History of Utopias (3) Study of the history of Utopias and Utopian schemes from Plato's Republic to contemporary American communes. Utopia, both as an antidote for reality, and as a seed-bed for social, political, and economic reform.

★ **150 The American Experience (3)** The history of the United States, with emphasis on major themes, ideas, and developments — nationalism, sectionalism, imperialism, industrialism, and others. Offered in spring semester.

†**151 History of United States I (3)** The social, economic, political, and intellectual development of the United States from the beginning of the Colonial period through Reconstruction. Offered every semester.

†**152 History of United States II (3)** The social, economic, political, and intellectual development of the United States from 1877 to the present, with emphasis on the new industrialism and on foreign affairs. Offered every semester.

166 20th-Century America (3) A survey of the United States since 1898. Emergence of the nation as a world power is stressed.

300 Varieties of History (3) Historical research techniques. Methodology, historiography, and varieties of history. Required of all history majors. Offered every semester.

301 History of South Asia (3) A historical study of developments on the Indian subcontinent (India and Pakistan), the course also considers those areas of Southeast Asia (Burma and Thailand) that have been traditionally influenced by the course of Indian events.

#**302 Modern India (3)** Social, religious, and cultural underpinnings of modern India against a backdrop of the subcontinent's chronological development. Hindu and Muslim traditions discussed in terms of their own social, religious, and historical dynamics and as examples of complexities of Third World national integration.

305 Modern China (3) Survey of the historical and cultural background of China. Emphasis is given to the significance of China's modern period and its impact on world affairs.

#**306 Chinese Civilization (3)** Study of dominant cultural, philosophical, and historical patterns that have influenced the development of China as it is today and the traditional way in which Chinese approach their own history.

#**308 Introduction to the Islamic World (3)** Study of the religio-cultural heritage of the Islamic world against a historical background. Selected areas of Middle, South, and Southeast Asia will be utilized to illustrate the flowering of Islamic arts, architecture, and poetry. Includes geography component. Offered in spring semester.

311 History of Africa to 1875 (3) A survey of African history to 1875, providing regional coverage of the entire continent, and an examination of African oral traditions.

312 History of Africa Since 1875 (3) A survey of African history since 1875, focusing on European colonialism, African resistance, and contemporary developments.

★ Approved distributive requirement course.
† HIS 151-152 – Approved two-semester substitute for distributive requirement.
# Approved interdisciplinary course.

■ 315 History of Latin America to 1825 (3) Pre-Columbian period, colonial Latin America, and movements for independence; Indian, European, and African backgrounds; government, economy, society, religion, culture, and enlightenment. Interaction of diverse cultures in the New World. Offered every semester.

■ 316 History of Latin America Since 1825 (3) Latin America in the 19th and 20th centuries; liberalism, conservatism, dictatorship, revolution, socialism, industrialization, agrarian reform, cultural-intellectual achievements, and international relations. Topical approach, using individual countries as case history illustrations. Offered every semester.

■ 317 History of Mexico (3) Mexico from Pre-Columbian period to present, including civilizations of Mayas and Aztecs, Spanish conquest, Colonial period, movement for independence era of Santa Ana, La Reforma, Diaz dictatorship, Mexican Revolution, cultural-intellectual achievements, international relations, and modernization of Mexico since the Revolution.

■ 318 The Ancient World (3) Classical Greece and Rome with consideration of economic, social, intellectual, and political history. Selected writings of the ancients.

■ 319 Medieval Europe (3) Western Europe from the fall of Rome to approximately 1300. Economic, social, political, and intellectual developments in the major kingdoms of the West; the history of the Universal Church. Offered in spring semester.

320 Renaissance and Reformation (3) Political, economic, social, and cultural forces that emerged in Europe from 1300 to 1650. The evolution of modern states and the rise of the middle class. Offered in spring semester.

321 Everyday Life in Early Modern Europe (3) An examination of the daily lives of Europeans of various social backgrounds from the 15th to 18th centuries. Topics will include dress, diet, recreation, labor, and medicine.

322 Family and Women in Europe: Renaissance to Industrial Revolution (3) Focuses on private and public aspects of the family in various European countries, and the role and everyday life of women of diverse social backgrounds. Special attention is given to changes over time.

■ # 323 Austrian Civilization (3) An interdisciplinary study of Austrian civilization, 1848–1938. Emphasis is placed on fin-de-siecle Vienna, not only as its pivotal role in Austrian culture but also as a testing ground for modernism in the West.

■ 324 Russian History to 1917 (3) Russian history from ninth century Kiev to the end of the Imperial period. Major emphasis on the continuing religious, economic, social, and political tradition peculiar to the Russian state. Offered in fall semester.

325 History of Journalism (3) A historical survey of the American press from Colonial times to the present, with special emphasis on the continuing struggle for press freedom and the new journalistic environment created by the emergence of mass media.

#329 Gender and Peace (3) Examination of the ways in which social constructions of gender intersect with perceptions and experience of war and peace.

■ 330 Conflicts in Modern Europe (3) Power politics in Europe; alliances and counteralliances; imperialism; First World War and Versailles peace settlements; emergence of totalitarian ideologies. Offered in fall semester.

331 20th-Century Europe (3) European fascism and communism; totalitarianism confronts liberalism; interaction between domestic politics and foreign policy; polarization of European politics; disintegration of the political institutions of the traditional state.

332 The Holocaust (3) Focuses on ethnic, nationalistic, economic, and religious causes of the Holocaust, including 20th-century Nazism, racism, and anti-Semitism; study of the Nuremburg trials.

333 European Economic History (3) European demographic and technological change; trade unions; agriculture; trade; the entrepreneur; distribution of income and welfare from the 10th century to the present.

344 History of Pennsylvania (3) The founding and development of Pennsylvania from its Colonial beginnings to the present with emphasis on the relation of the past to the present.

■ 348 The Bible in History (3) The Bible as a historical record. From the Pentateuch through the prophetic literature, the Apocrypha, the Pseudepigrapha, and the Dead Sea Scrolls to the New Testament. Historical records of the ancient Near Eastern civilizations will be compared with Biblical sources. Offered in spring semester.

349 The Jew in History (3) Review of the 4,000 years and five civilizations that have welcomed the Jewish people. Emphasis on the Jews in contemporary society.

352 Modern American Military History (3) The role of the American military in shaping the course of the nation in the 20th century. Offered in fall semester.

354 U.S. Labor History (3) American labor from the colonial era to modern times. Examines labor and government, labor and law, labor and politics, labor and women, children and minority groups, labor and technology, real wages, and labor theory.

356 U.S. Environmental History (3) An examination of the transformation of the American landscape, the history of American environmental policy, and the development of today's environmental crisis.

357 Diplomatic History of the United States (3) The theory and practice of American diplomacy from Colonial times to the present with emphasis on the 20th century. Offered in spring semester.

358 Economic History of the United States (3) The economic development of the American nation as it evolved from a frontier, agricultural country into an urban, industrial power. Offered in fall semester, alternate years.

359 Depression Decade (3) An examination of the causes and consequences of the Great Depression, including business cycle theory, banking, technology, labor problems, the New Deal, and the contributions of the decade to modern American life.

360 Technology and American Life (3) Promises and practices of American life in response to the interaction of American forms, values, and scientific-technological change from the Colonial period to the present.

361 Constitutional History of the United States (3) The development of the Constitution of the United States from the Philadelphia convention to the present with emphasis on major Supreme Court decisions.

362 Violence in America (3) A study of violence in American society as an instrument of change and a method of social control. Offered every semester.

364 U.S. Urban History (3) A survey of the rise of the American city from early Philadelphia to the modern metropolis. The recurring themes of growth, immigration, social mobility, city politics, city planning, urbanism, and suburbanism.

365 Popular Culture in 20th-Century America (3) A survey of the history of modern American popular culture and arts, and their impact on American society.

366 The Turbulent Sixties (3) Examination of the stress and conflict in American politics, arts, literature, and society of the 1960's. Offered in spring semester.

370 American Indians (3) A survey of Indian civilization on the continent of North America and the confrontation of this civilization with white culture.

373 Afro-American History (3) The Afro-American: origins, period of slavery, industrialization of the South, migration to northern urban centers, civil rights movements, and the evolution of "Black Power." Offered in fall semester.

375 A History of the Arab-Israeli Conflict (3) This course will examine the history of the Arab-Israeli conflict and the factors that both encourage and impede resolution. Consideration will also be given to the history of the U.S. involvement in the conflict.

◆ 399 Topics in History (3) Topics may vary each semester. Emphasis on student research and discussions.

400 Seminar (3) In-depth research, study, and discussion of a selected historical topic. Topics will vary. Recommended for seniors. Offered in spring semester. PREREQ: HIS 300.

406 20th-Century Japan (3) The course deals with Japan's role in Asian and world affairs from the Meiji Restoration of 1868 through the World War II period. Concludes with an assessment of Japan's post-World War II role as an economic power positioned to re-emerge as a major political entity.

407 History of Brazil (3) A general survey of Brazil from 1500 to the present. Emphasis will be placed on economic and political issues, slavery and race relations, literature, and current ecological problems relative to the Amazon Basin.

◆ 410 Independent Studies in History (1-3) Research projects, reports, and readings in history. Open to seniors only. PREREQ: Permission of department chairperson.

411 Middle East to 1700 (3) The historical evolution of the Middle East from just before the time of Muhammad until 1700. The course seeks to promote an understanding of the nature and rise of the religion of Islam, the spread of Islamic civilization, and the evolution of the Arab and Ottoman empires. Offered in fall semester.

412 Middle East Since 1600 (3) The historical evolution of the Middle East from 1600 to the present. The course seeks to promote a historically sound understanding of the conflicts and differences between Western and Middle Eastern societies, as well as the continuing interplay of secular and religious forces in the history of the region. Offered in spring semester.

415 Science in History (3) This course offers an introduction to the historical evolution of modern science. Emphasis is placed on the life and achievements of noted scientists against the backdrop of their time and culture. Consideration is also given to the impact of developing science on the shaping of Western values.

■ Culture Cluster
Approved interdisciplinary course.
◆ This course may be taken again for credit.

416 **Crime and Punishment in Europe, 1450-1789** (3) Focuses on the historical development of criminal law, criminalization processes, court procedures, the use of judicial torture, crime rates, personal characteristics of the sentenced criminals, and the punishments they received.
■ 420 **Biography of Modern European Women** (3) A discussion of biography as a form of historical writing and writing about women.
421 **History of England to 1688** (3) The British people and their mores, institutions, and achievements from the earliest times to the Glorious Revolution.
422 **History of England Since 1688** (3) England as a world leader during the Commercial and Industrial Revolutions, the evolution of the democratic process, and the emergence of liberalism followed by the democratic welfare state. Offered in spring semester.
■ 423 **Modern Germany** (3) Germany in the 19th and 20th centuries: Napoleonic era, rise of Prussia, nationalism and unification, imperialism and World War I, National Socialism, World War II, and divided Germany. Offered in fall semester.
■ 425 **Soviet Russia** (3) Its rise and fall in light of traditional Russian patterns and the communist experiment. Offered in spring semester.
■ 426 **History of Modern Italy** (3) A study of Italian unification, the Era of Liberalism, Fascism, and post-World War II developments. Offered in fall semester, alternate years.
■ 427 **Modern France: 1789 to Present** (3) The French Revolution; Napoleon; Bourgeois France; Third Republic; The Great War and Versailles; Nazism and the Popular Front; the collapse of 1940; the Fourth Republic; and the DeGaulle era. Offered in spring semester, alternate years.
■ 435 **European Intellectual History Since 1800** (3) A cultural history of ideas in 19th- and early 20th-century Europe.
445 **Oral History** (3) An examination of contemporary history by making taped interviews of reminiscences of people involved in recent political events, human rights movements, local or national issues, etc.
447 **Jesus and Marx** (3) The relationship between Christianity and Marxism from the confrontation and contradiction of the 19th century to the coexistence and cooperation of the 20th century. Offered in spring semester.
◆ 450 **Internship in History** (1-3)
451 **Women in America** (3) American women's daily routines, social roles, and search for rights and identity since Colonial days. Recent goals, values, and conflicts. Offered in fall semester.
455 **American Intellectual History** (3) Political and economic thought, theology, science, philosophy, and literature.
456 **Reformers and Radicals: Social Movements in American History** (3) Probes the origins and legacies of social movements in America, varying from abolitionism and temperance in the antebellum age to Afro-American.
458 **History of the Cold War** (3) Origins and evolution of the Cold War with emphasis on the rationale for, and objectives of, American foreign policy since 1945. Includes an examination of the historical interpretations of the era.
460 **Field Studies in History** (3) A fully supervised learning experience designed to expose students to the culture, artifacts, and research facilities of a given country or area.
462 **Social and Cultural History of the United States** (3) The evolution of American society with emphasis on the impact of improving material conditions in labor, the arts, education, religion, social mores, and family life. The changing status of women, blacks, and immigrants.
474 **American Religions** (3) The changes of American religion from the Pilgrims of New England to the cults of California. Offered in fall semester.
480 **Computer Applications in Historical Research** (3) Methods of historical research and analysis based on the use of personal computers.

■ Culture Cluster
◆ This course may be taken again for credit.

Interdisciplinary Programs

Richard J. Webster, *Coordinator*

West Chester University offers two interdisciplinary programs leading to a Bachelor of Arts degree:

American Studies
Comparative Literature Studies

West Chester also offers six interdisciplinary programs leading to transcript recognition:

Ethnic Studies
Latin American Studies
Linguistics
Peace and Conflict Studies
Russian Studies
Women's Studies

These programs give students the opportunity to develop a synthesis of knowledge from several disciplines. Drawing upon professors from across the campus, the programs are directed by a Committee of Interdisciplinary Programs under the aegis of the dean of the College of Arts and Sciences. See individual programs for course sequences.

American Studies Program

AMERICAN STUDIES COMMITTEE

Walter J. Fox, Jr., *English*
Patricia C. Johnson, *History*
Sterling E. Murray, *Music History*
C. James Trotman, *English*
Richard J. Webster, *History, Coordinator*
Ruth I. Weidner, *Art*

Students are introduced to a broad spectrum of American culture, and are further encouraged to study in depth and to develop career interests through concentrations in American art history, black studies, historic preservation, environmental studies, journalism and editing, and museum studies. An optional internship provides on-the-job experience.

BACHELOR OF ARTS — AMERICAN STUDIES

1. General Requirements, see pages 35–39 — 51 semester hours
2. Foreign Language/Culture Requirements — 15 semester hours
3. Required Core — 21-33 semester hours
   AMS 200 (3)
   LIT 200-201 (6)
   HIS 151-152 (6)
   AMS 300 (3)
   AMS 400 (3)
   or AMS 415 (1-15)
4. Elective Core — 18 semester hours
   Six American-topic courses are to be taken in anthropology, art history, geography, history, literature, music history and literature, philosophy, political science, and sociology, with no more than two courses from one discipline.
5. Elective Concentration
   Enough courses to insure that a minimum of 128 semester hours are taken. Each American Studies major must submit for approval a proposed course of study at the beginning of the junior year. For guidance consult the American Studies program coordinator.

Minor in American Studies — 18 semester hours

For transcript recognition of an American Studies minor, a student must take 18 semester hours allocated in the following areas:
American Studies (6)
American History, preferably HIS 151 or HIS 152 (3)

American Literature, preferably LIT 200 or LIT 201 (3)
American topics: One course from the arts, literature, or philosophy, and one course from history or social and behavioral sciences, or other courses approved by the adviser. (6)

COURSE DESCRIPTIONS
AMERICAN STUDIES

Symbol: AMS

AMS 100 **Introduction to American Cultures** (3) A course designed for the orientation of foreign students and new residents to life and study in the United States. A study of American higher education, personal values, attitudes, and cultural patterns. Emphasis is on the diversity of peoples and lifestyles. Not open to U.S. citizens for graduation credits.

#200 **American Civilization** (3) An interdisciplinary study of the forces, forms, and values that have contributed to the making of American civilization. Several academic disciplines are drawn upon in exploring the "Americaness" of American institutions, thought, behavior, and material culture.

#210 **Mass Media and Popular Culture** (3) An exploration of the role of media in the development of American popular culture. Particular emphasis will be given to the transformations brought about by mass media after 1880 and the increasing corporate involvement in mass media during the 20th century.

300 **American Material Culture** (3) An interdisciplinary study of American civilization through the examination of its built environment, and crafted and manufactured artifacts from the Colonial period to the mid-20th century.

305 **American Decorative Arts** (3) Study of decorative and utilitarian objects of the American household from the Colonial period through World War I.

400 **Senior Thesis or Project** (3) A concluding "statement" incorporating the interdisciplinary generalist approach.

401 **Independent Study** (1-3) An opportunity to pursue alternative study projects outside the classroom; field work in community resources, etc.

◆ 415 **American Studies Internship** (1-15) Cooperative, service/learning experience at a community agency, business, or institution.

Approved interdisciplinary course.
◆ This course may be taken again for credit.

Comparative Literature Studies Program

Kostas Myrsiades, *Coordinator*

PROFESSORS: K. Myrsiades, Schlau, Trotman

ASSOCIATE PROFESSORS: McDonald, Ward

ASSISTANT PROFESSORS: Awuyah, Maltby, L. Myrsiades, Ramanathan

This program provides a curriculum option for students with an interest in international studies by offering a broad background in European and non-Western culture and literature.

This program is responsive to recent developments in professional business, law, and medical schools, which stress admission of students with humanities backgrounds or humanities complements to their scientific or technical backgrounds, and it reflects the growth of professional school programs that include more options in the humanities.

More specifically, this program is designed to answer student requests for a program that supplies a greater breadth of literature than is commonly offered in a language program and a greater variety than that offered in an English department.

BACHELOR OF ARTS — COMPARATIVE LITERATURE STUDIES

1. General Requirements, see pages 35–39 — 51 semester hours
2. Foreign Language Requirement — 3-12 semester hours
3. Related Course Requirements — 18 semester hours
   (Second language or minor)
4. Cognate Requirements — 12 semester hours
   (Courses related to student's major area of concentration)
5. Comparative Literature Core — 15 semester hours
   (CLS 200, 261, 310, 367, and 400)
   (A Grade Point Average of 3.00 is required for these courses.)
6. Comparative Literature Electives — 15 semester hours
   Five electives that reflect a variety of genres, periods, traditions, approaches, and theoretical concerns, selected from those courses listed below. Students wishing to take courses other than those courses listed below must have the written approval of the Comparative Literature Committee.
7. Literature in the Original Language — 6 semester hours
   Two courses in the literature of a language other than English.

Minor in Comparative Literature — 15 semester hours

*Select ONE course in each of the areas listed below.

1. Literature and the other arts
   (CLS 200, 201, 368, or 370)
2. Theory, intellectual history, or literary criticism
   (CLS 310 or 364)
3. Theme, genre, or movement
   (CLS 358, 359, 361, or 362)
4. Relationship, influence, or intertextuality
   (CLS 304, 309, 363, 367, or 400)
5. Non-Western literature or literature in a language other than English
   (CLS 360, 400, or 411)

NOTE: Not all course numbers available for each category above are listed. Please check with the Comparative Literature Studies coordinator in Philips 210 (610-436-2901) for other possible substitutions.

Minor in Film Criticism — 18 semester hours

1. Required Course — 3 semester hours
   FLM 200
2. Elective Courses — 15 semester hours
   Any five courses selected from the following list with approval of the adviser:
   CLS 304, 363, 364, 368, 369, 400, and 410
   COM 217 and 317
   FLM 201, 300, and 301

* For course descriptions see English and Foreign Languages sections in this catalog. For related courses in departments other than English and Foreign Languages, consult the *Handbook for Comparative Literature Studies* available in Philips 210.

COURSE DESCRIPTIONS
COMPARATIVE LITERATURE STUDIES

Symbol: CLS

★ 165 **Introduction to World Literature** (3) This course acquaints students with the "masterpieces" of Western literature from classical antiquity to the present. This course can be taken as an alternative to LIT 165.

200 **Interrelations of Comparative Literature** (3) This course investigates the relationship between literature and art, film, philosophy, and critical theory.

#201 **Classical Mythology in the 20th Century** (3) Classical myths and their significance in selected works of literature, film, and art.

203 **African Studies** (3) This course studies African culture through literature, anthropology, and history. It focuses on the socio-cultural and historical contexts of African writing through the colonial and postcolonial periods.

†260 **Continental Literature I** (3) Literature of continental Europe from classical times through the Renaissance.

†261 **Continental Literature II** (3) Literature of continental Europe from Neoclassicism to the present.

◆ 297 **Themes in Contemporary Literature** Topics to be announced each time course is offered.

304 **Women and Film** (3) An examination of the role of women in contemporary world cinema and the feminist film.

309 **Literature Translation Workshop** (3) A writing workshop on the theory and practice of literary translation.

310 **Contemporary Literary Criticism** (3) A survey of the major developments in European literary criticism during the 20th century with emphasis on the developments of the last 20 years.

■ 311 **Contemporary Latin-American Narrative** (3) An examination of Latin-American narrative (short story, novella, novel, and testimonial literature). Spanish- and Portugese-language writers from South and Central America, Mexico, and the Caribbean will be studied, from the period of magical realism (1950's and 1960's) through the present. They may include Isabel Allende, Jorge Amado, Miguel Angel Asturias, Jorg Luis Borges, Gabriel García Márquez, Clarice Lispector, Elena Poniatowska, and Luis Rafael Sánchez.

#329 **Gender and Peace** (3) An examination of the ways in which social constructions of gender intersect with perceptions and experiences of war and peace.

350 **Computer Applications in the Humanities** (3) This course is designed to provide an introduction to the computer and its applications in a number of humanistic disciplines (literature, history, and writing, but some attention also will be given to foreign languages, linguistics, music, and art.)

351 **African Literature** (3) A study of the representation of Africa through the perspectives of African and non-African writers.

352 **Modernity/Postmodernity** (3) A critical analysis of the modernity/postmodernity debates from the integrated perspectives of literature, philosophy, history, and politics.

358 **Women in Western Literature** (3) An inquiry reaching back into classical antiquity for some prototypes of women in the literature of the West. Readings from Aeschylus, Sophocles, Aristophanes, Euripides, Ovid, Dante, Petrarch, Shakespeare, Moliere, Austen, Flaubert, James, Tolstoy, Shaw, Cather, Giraudoux, and others.

359 **Women in Modern Fiction** (3) Readings, analysis, and discussion of works of contemporary fiction that present major depictions of women by authors such as Sarraute, Duras, Böll, Walker, Kundera, Morrison, Woolf, etc.

360 **Literature of Modern China** (3) A survey of the literature of the People's Republic of China.

361 **Modern Continental Drama** (3) A consideration of the chief writers who influenced the modern drama: Ibsen, Strindberg, Chekhov, Hauptmann, Pirandello, Sartre, Brecht, and Ionesco.

362 **Modern Continental Fiction** (3) Important modern European writers in translation: Flaubert, Dostoevsky, Unamuno, Gide, Mann, Kafka, Camus, Sartre, and Moravia. Their aesthetic and philosophical contributions to modern fiction.

363 **Soviet Literature and Film** (3) A comparative approach to selected 20th century Soviet works of fiction, poetry, drama, and film.

364 **Eastern European Literature and Film** (3) A critical and analytical approach to Eastern European literature and film covering major movements and theory since World War II.

367 **Classical Mythology** (3) An examination of Greek mythology through the works of Homer, Hesiod, the Greek tragedians, and Greek lyric poets.

368 **Literature, Myth, and Film** (3) The influence of Greek mythology on contemporary Western literature and film.

369 **Literature and Film** (3) The interrelationship between selected works of world fiction and their film adaptations.

#370 **Literature and Medicine** (3) A course treating the study of literary works, film, and selected readings from other areas (history, science, fiction, and nonfiction) to generate an understanding of the relationship of human values to medicine, illness, and issues of related importance to physicians.

#371 **Law, Literature, and Communication** (3) A look at the presentational aspects of law— legal writing and oral argument—its constructions in narrative—law as literature and literature as law—and the relationship of law to anthropology, psychology, history, and sociology.

◆ 400 **Comparative Literature Seminar** (3) Topics such as Beckett/Joyce, Homer/Joyce, Greek comedy, Greek tragedy, myth, and film are offered periodically. Required of comparative literature majors in their junior or senior year.

◆ 410 **Independent Study in Comparative Literature** (3)

◆ 411 **Foreign Study in Comparative Literature** (3)

FILM THEORY AND CRITICISM

Symbol: FLM

200 **Introduction to Film** (3) A critical and analytical approach to world cinema covering film theory and the major film movements (Soviet Realism, German Expressionism, Italian Neo-Realism, French New Wave, Cinema Nuovo, New German Cinema, and Surrealism) from the beginning to present. (Group E)**

201 **American Film** (3) The function of cinema in contemporary society as a socio-cultural, economic, and political object as seen through critical analysis of American films. (Group E)**

300 **Private Screening** (1) Eight to 12 narrative film classics per semester on a specific topic or theme.

301 **Documentary Film** (3) Understanding and enjoying the social, philosophic, economic, and political aspects of documentary film. (Group E)**

★ Approved distributive requirement course.
Approve interdisciplinary course.
† Approve two-semester substitute for a distributive requirement.
◆ This course may be taken again for credit.
■ Culture Cluster
** See the department handbook for group descriptions.

Ethnic Studies Program

Bonita Freeman-Witthoft, *Director*
C. James Trotman, *African-American Coordinator*
Stacey Schlau, *Hispanic-American Coordinator*
Irene G. Shur, *Jewish-American Interim Coordinator*

STEERING COMMITTEE

Marshall J. Becker, Erminio Braidotti, Mary Crawford, Andrew E. Dinniman, Stephen D. Gilmour, William I. Guy, Charles Hardy, William L. Hewitt, Mildred C. Joyner, Deborah Malstedt, Bhim Sandhu, James G. Smith, Jerome M. Williams, Robert J. Young

The Ethnic Studies Institute (ESI) offers a minor and a certificate to any student, regardless of major, who satisfactorily completes 18 semester hours of work in ethnic studies. Study may lead to a general certificate in ethnic studies or to a specialized certificate in one of the following areas:

- African-American Studies
- Hispanic-American Studies
- Jewish-American Studies
- Native American Studies

For current requirements and a list of approved courses in each specialization, consult the director of ethnic studies.

For each option presently offered there are, in addition to the relevant ethnic studies core courses, certain cognate courses. These cognate courses do not necessarily deal directly with ethnic group life but give an added dimension of social and historical background.

As soon as possible, students should register their intent to earn the minor with the director of the Institute for Ethnic Studies. At the end of each semester, students should report the ethnic-related courses completed during the semester and the courses planned for the following semester to the director. An updated list of courses approved for credit is available each semester from the Institute for Ethnic Studies before the advising and scheduling period. Students can use an approved ethnic-related course toward the completion of the certificate of minor in Ethnic Studies at the same time it is being used to fulfill their major, minor, or elective requirements.

Students are encouraged to attend at least two cultural ethnic events—speakers, musical programs, art shows, theatre productions, or films—each year.

For advising in Ethnic Studies, contact Bonita Freeman-Witthoft, 201 Old Library.

Minor in Holocaust Studies 18 semester hours

The program in Holocaust Studies deals not only with historical aspects of the Holocaust, but also with moral and political issues involved in the prevention of future holocausts.

This minor may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

For advising in Holocaust Studies, contact Dr. Irene G. Shur in Main Hall.

COURSE DESCRIPTIONS
ETHNIC STUDIES

Symbol: SSC

#201 **Global Perspectives (3)** This course is intended to help students develop the competencies needed for the understanding of, and meaningful participation in, the world issues of the 1990's.

◆ 385 **Holocaust Workshop (3)**

◆ 480 **Ethnic Cultures Workshop (3)** This workshop considers the history, traditions, customs, and contributions to American life of various ethnic groups. The lectures and special programs are designed to increase the student's knowledge of the multicultural nature of American society. Projects, specifically tailored to individual needs, are directed by a faculty member of the Ethnic Studies Institute.

Approved interdisciplinary course.
◆ This course may be taken again for credit.

Latin-American Studies Program

Erminio Braidotti and Raymond Doyle, *Coordinators*

Any student in the University, regardless of his or her area of specialization, may earn a minor and a letter of verification in Latin-American Studies after satisfactory completion of 18 semester hours of work, distributed as follows:

Minor in Latin-American Studies

Required: Either A or B 18 semester hours

A. 1. Spanish or Portuguese (Intermediate level or above) 6 semester hours
2. Latin-American history 6 semester hours

OR

B. 1. Latin-American history 6 semester hours
2. Latin-American civilization and thought 6 semester hours

Electives 6 semester hours

Selected under advisement from Latin-American-oriented courses offered by the departments of Anthropology and Sociology, Geography and Planning, Political Science, Economics, Art, or others. In track A, one three-credit course must be devoted to literature, art history, or music.

For advising, see Professor Braidotti in the Department of Foreign Languages or Professor Doyle in the Department of History.

A student should maintain a 2.50 average in area-studies courses to be recommended for graduate work in the area-studies concentration.

Linguistics Program

Dennis L. Godfrey, *Coordinator*

CONTRIBUTING FACULTY

Diane O. Casagrande, *Communication Studies*
W. Stephen Croddy, *Philosophy*
Stephen D. Gilmour, *Foreign Languages*
Jane E. Jeffrey, *English*
John T. Kelly, *English*
Cheri L. Micheau, *English*
Garrett G. Molholt, *English*
Frederick R. Patton, *Foreign Languages*
Paul A. Stoller, *Anthropology and Sociology*
Andrea Varricchio, *Foreign Languages*
Michael S. Weiss, *Communicative Disorders*

The minor in linguistics is an interdisciplinary program offered by the departments of Anthropology and Sociology, Communicative Disorders, English, Foreign Languages, Philosophy, and Communication Studies. Its purpose is to provide the student with a foundation in the analysis of the various aspects of language. Students wishing to enter the program must consult the program coordinator. To receive credit for the minor in linguistics, a student must complete 18 semester hours of course work. The program coordinator must approve all courses.

Minor in Linguistics 18 semester hours

1. Required Courses 9 semester hours
ENG/LIN 230, ENG 335 (or any other historical linguistics course), ENG 331 (or any other structural grammar course)
2. Electives 9 semester hours
A. Choose one of the following:
ENG 330, FRE 365, GER 365, RUS 365, SPA 365, SPP 106, or any other approved course in phonology or phonetics

B. Choose one of the following:
ENG 339, 340; LIN 250; ANT/LIN 380; PHI/LIN 330, 360; COM/LIN 415; or any other approved comparable course

C. Choose an additional course from either Group A or B above, or choose one of the following:
COM 307; ENG 430; LAN 250; LIN 411, 412; LIT 430, 431; PHI 190, 436; PHY 110; SPP 107; or any other approved linguistics course

For course descriptions, see Anthropology and Sociology (ANT), Communicative Disorders (SPP), Communication Studies (COM), English (ENG or LIT), Foreign Languages (LIN, FRE, GER, RUS, or SPA), Philosophy (PHI), or Physics (PHY).

Peace and Conflict Studies Program

Frederick R. Struckmeyer, *Director*

ADVISORY COMMITTEE: Charles Bauerlein, Roger Bove, Diane Casagrande, Louis Casciato, Anne Dzamba, David Eldredge, Robin Garrett, Harvey Greisman, Tom Heston, Barbara Kauffman, Carol Radich, Bhim Sandhu, Stacey Schlau, William Seybold, Irene Shur

Peace and Conflict Studies examines social conflict, conflict resolution, and cooperation at the group, national, and international levels. This process involves understanding factors that contribute to peace with justice, various functions of conflict, and processes by which conflict may be managed. The minor fosters skills for both study and action. Though primarily an enrichment to liberal education, this minor is relevant to a variety of careers, both traditional and emerging. The former include law, communications, education, and government. However, there are also many career opportunities with a wide range of public interest and advocacy organizations.

The Peace and Conflict Studies minor consists of 18 credit hours, some of which also may be used to fulfill other degree requirements. This minor may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

Minor in Peace and Conflict Studies — **18 semester hours**

1. Required Course — 3 semester hours
   Introduction to Peace and Conflict Studies (3): SSC 200.
2. Electives — 15 semester hours
   These include COM 216, 312, 403, and 410; GEO 232; HIS 146 and 362; HIS/WOS 329; LIT 162 and 309; PHI 207 and 382; PSC 315 and 316; SOC 341, 371, and 376; and SSC 201. Other courses, under advisement, also may satisfy part of the minor. It also should be noted that requirements for the minor are currently undergoing revision and are expected to be in place by January 1995. For further information, see Professor Struckmeyer, Department of Philosophy.

COURSE DESCRIPTION
#SSC200 Introduction to Peace and Conflict Studies (3) An interdisciplinary study of the causes and functions of societal conflict and processes of controlling conflict.

Approved interdisciplinary course.

Russian Studies Program

Frederick Patton, *Coordinator*

This program is offered jointly by the faculty of Arts and Sciences and the faculty of Professional Studies.

Any student in the University, regardless of his or her area of specialization, may earn a minor specialization in Russian Studies after satisfactory completion of 18 semester hours of work, distributed as follows:

Minor in Russian Studies — **18 semester hours**

Required: Either A or B

A. 1. Russian language (intermediate level or above) — 6 semester hours
   2. Russian history and/or politics — 6 semester hours

OR

B. 1. Russian history and/or politics — 6 semester hours
   2. Russian civilization, culture and/or politics — 6 semester hours

To fulfill requirements for the Russian Studies minor, students may choose from the following courses: ARH 405 (Russian Art), CLS 363 (Soviet Literature and Film), CLS 364 (Eastern European Literature and Film), ERU 209 (Russian Culture—Soviet Period), GEO 304 (The Soviet Union), HIS 324 (Russian History to 1917), HIS 425 (Soviet Russia), PSC 246 (Soviet Politics), PSC 311 (Soviet Foreign Policy), PSC 349 (Comparative Communism), RUS 201- 412 (Russian language courses), and RUS 310 (Russian Literature in Translation).

Electives — **6 semester hours**

Selected under advisement from Russian-oriented courses offered by the departments of Political Science, Anthropology and Sociology, English, Art, or other departments of WCU. In track A, one three-credit course must be devoted to literature, art, history, or music.

For advising, see Professor Patton in the Department of Foreign Languages.

A student should maintain a 3.00 average in area-studies courses to be recommended for graduate work in the area-studies concentration.

Women's Studies Program

Stacey Schlau, *Coordinator*

STEERING COMMITTEE

Helen Berger, Maria Boes, Rebecca Brey, Emma Lee Brown, Mary Ann Burns-Duffy, Diane Casagrande, Mary Crawford, Anne Dzamba, Celia Esplugas, Robin Garrett, Anne Herzog, Jane Jeffrey, Patricia Johnson, Mary Keetz, Elizabeth Larsen, Deborah Mahlstedt, Mary McCullough, Avis McDonald, Lynette McGrath, Patricia Patrick, Sheila Patterson, Jean Piper-Burton, Ruth Porritt, Geetha Ramanathan, Arlene Rengert, Frauke Schnell, Carol Shloss, Mary Stieber, James Trotman, Karin Volkwein, Richard Webster

The Women's Studies Program consists of an interrelated group of courses offered in a wide variety of academic disciplines. The program operates under the supervision of the Women's Studies Steering Committee. This program is envisaged both as an enrichment to liberal education and as a preprofessional field. The social transformation that is taking place in society and in intellectual life is making study in this area an asset in many arenas.

The aim of the program is to integrate the perception and experience of women into the curriculum and to encourage inquiry into previously neglected areas, such as women's history, women's literature and art, psychology of women, and women's position in society.

Women's Studies Courses

ARH 419	Women in Art: Madonna or Model?
CLS 304	Women and Film
CLS 358	Women in Western Literature
CLS 359	Women in Modern Fiction
ECO 303	Economic Role of Women
HEA/NSG 109	Health Issues of Women
HIS/CLS/WOS 329	Gender and Peace
HIS 420	Biography of Modern European Women
HIS 451	Women in America
LIT 204	Black Women Writers of America
LIT 274	Feminist Poetry
PED 380	Women and Sport
PSC 301	Women in Politics
PSY 365	Psychology of Women
SOC 346	Sociology of Gender
WOS 225	Women Today: An Introduction to Women's Studies
WOS 315	Third World Women
WOS 320	Independent Study
WOS 325	Special Topics in Women's Studies
WOS 400	Internship
WOS/PHI 405	Feminist Theory
WOS 410	Senior Colloquium
WOS 415	Senior Project

These courses are open to all students as free electives under general requirements. With the permission of their departments, students also may take these courses as electives within their major or minor programs.

Minor in Women's Studies **18 semester hours**

A women's studies minor consists of 18 credit hours, no more than two of which may be taken in a single department. Two courses are required for the minor: WOS 225, and either WOS 405, 410, or 415. Other courses may be chosen from the list of women's studies offerings. Transcript recognition will be awarded upon completion. This minor may be taken in the Bachelor of Arts or Bachelor of Science in liberal studies degree program.

For advising in Women's Studies, contact Dr. Stacey Schlau, Main Hall 211.

Descriptions of WOS courses in Women's Studies appear below. See departmental listings for all other courses.

COURSE DESCRIPTIONS
WOMEN'S STUDIES

Symbol: WOS

#225 **Women Today: An Introduction to Women's Studies** (3) An interdisciplinary course designed to enable students to analyze various kinds of statements on women, to question the implications of changing cultural patterns, and to sample first-hand efforts for change. Satisfies interdisciplinary requirement. Offered every semester.

#315 **Third-World Women** (3) This course will examine the nature of women's lives in the Third World, focusing on topics such as family, education, health, development policies, and political change. Geographic areas studied include Africa, Asia, Latin America, and the Middle East. Offered spring semester, odd-numbered years.

◆ 320 **Independent Study** (3) Independent research and study for upper-division students. Topic to be approved by supervising faculty member. PREREQ: WOS 225. Offered as needed.

◆ 325 **Special Topics in Women's Studies** (3) Selected (and changing) topics, e.g., Ethnic Women; Women in the Workplace; Love, Marriage, and Divorce. Offered as projected enrollments warrant.

#329 **Gender and Peace** (3) An examination of the ways in which social constructions of gender intersect with perceptions and the experience of war. Offered fall semesters.

◆ 400 **Internship** (3) This course is designed to allow students the opportunity to put into practice, outside the academic setting, the knowledge regarding women's experiences gained in other courses. Some possible sites might be a women's health clinic, a business, a newspaper, a social service agency, or an electoral campaign. There will be both an on-site and a faculty supervisor. PREREQ: WOS 225 and two other women's studies courses. Offered as needed.

#405 **Feminist Theory** (3) Designed to introduce and discuss basic questions in contemporary feminist theory, the course will explore different philosophies of feminism and include such issues as motherhood, intersections with other theories of oppression, and body politics. Offered spring semester, even-numbered years. PREREQ: WOS 225 or permission of the instructor.

◆ 410 **Senior Colloquium** (3) This is one of the choices for the final required course for the minor. Sample topics include global feminism, mothering, the experiences of women of color, and feminist utopias. Offered as needed.

◆ 415 **Senior Project** (3) Preparation of research in any area of women's studies, to be decided by student and adviser. Supervision includes exercises in method and bibliography. Usually, a lengthy research paper will be the final result. Offered as needed.

Approved interdisciplinary course.
◆ This course may be taken again for credit.

Liberal Studies Program

James D. Fabrey, *Director*

In addition to programs leading to baccalaureate degrees in specific academic fields, the University offers a degree in liberal studies. The program is designed for either traditional or nontraditional students who seek a general education, or who desire to build majors that cut across traditional disciplinary lines. An Associate of Arts degree in liberal studies is available to students seeking a two-year degree.

Typically, the liberal studies student selects the undeclared major program if entering the University as a freshman. After completing at least 32 semester hours, and after achieving a minimum Grade Point Average of 2.00, the student may request an interview with the director of liberal studies for the purpose of planning a curriculum in one of the three available tracks. Students may enter the liberal studies program from other majors of the University, or as transfers from other colleges, by the same process and by meeting the same requirements. It is University policy that no student, whether presently enrolled at West Chester or attempting to be admitted from another university, is permitted to enroll in the liberal studies program after earning 80 semester hours.

Three advisement tracks within two separate baccalaureate degrees are available. The Bachelor of Arts in liberal studies—arts and sciences track is designed principally for students who are interested in a general education with no specific orientation toward career preparation. Alternatively, either the Bachelor of Arts in liberal studies—career preparation track, or the Bachelor of Science in liberal studies— science and mathematics emphasis track will be more useful to the student who is seeking to construct a career-centered curriculum that is not otherwise available at West Chester University.

BACHELOR OF ARTS IN LIBERAL STUDIES — ARTS AND SCIENCES TRACK

1. General Requirements, see pages 35–39 (MAT 105, 121, or a calculus course) — 51 semester hours
2. Foreign language (Students must show competency through the 202 level.) — 0-12 semester hours
3. Liberal studies breadth requirements (language culture cluster, natural and computer sciences, behavioral and social sciences, humanities and communications, and the arts) — 45 semester hours
4. Liberal studies electives of the student's choice at the 300 and 400 level — 20 semester hours
5. At least one minor offered by the the College of Arts and Sciences, the School of Music, or by the departments of Economics, Geography, or Political Science

BACHELOR OF ARTS IN LIBERAL STUDIES — CAREER PREPARATION TRACK

1. General Requirements, see pages 35–39 (MAT 105, 121, or a calculus course) — 51 semester hours
2. Foreign language (Students must show competency through the 202 level.) — 0-12 semester hours
3. Liberal studies breadth requirements (natural sciences, behavioral and social sciences, humanities and communications, and the arts) — 24 semester hours
4. Liberal studies electives of the student's choice at the 300 and 400 level — 30 semester hours
5. At least one minor offered by a department associated with the student's career interest

BACHELOR OF SCIENCE IN LIBERAL STUDIES — SCIENCE AND MATHEMATICS TRACK

1. General Requirements, see pages 35–39 (MAT 105, 121, or a calculus course) — 51 semester hours
2. Liberal studies breadth requirements (behavioral and social sciences, humanities and communications, and the arts) — 15 semester hours
3. Science and mathematics cognate requirements. Seven to nine semester hours in any four of the following departments: Biology (BIO 110 or above), Chemistry (CHE 103 and CRL 103 or above), Geology/Astronomy (above ESS 111), Mathematics (MAT 110 or above, or CSC 115 or above), and Physics (PHY 130 or above) — 32 semester hours
4. Liberal studies electives of the student's choice at the 300 and 400 level — 20 semester hours
5. At least one minor selected from the departments of Biology, Geology and Astronomy, Mathematics and Computer Science, or Physics

ASSOCIATE OF ARTS — LIBERAL STUDIES

The University offers a program of studies leading to the degree of Associate of Arts in liberal studies. This program is especially suited for students who want a solid, two-year foundation from which to move into a wide variety of fields, including business, the sciences, and public service. Many students also have used the associate degree as a means of introducing themselves to the university setting, and then later building on it toward the completion of a baccalaureate degree.

The program consists of a set of general education courses and 15-21 semester hours in an area of concentration. The specific requirements and areas of concentration are outlined on pages 38–39. Students who elect one of these areas of concentration receive their academic advice from a faculty member of the program or department responsible for that area of concentration with guidance and assistance from an adviser in the Office of Liberal Studies.

University policy prohibits a student from entering the Associate of Arts degree after having earned 50 semester hours of credit.

THIS PROGRAM IS BEING SUSPENDED; HOWEVER, STUDENTS CURRENTLY ENROLLED MAY CONTINUE IN THE PROGRAM. FOR INFORMATION CONTACT THE DIRECTOR OF LIBERAL STUDIES AT 610-436-1096.

Students in the Bachelor of Arts tracks have the option of using up to six semester hours of their liberal electives as Senior Thesis (LST 490) credits. Interested students should consult with the program director well before earning 80 semester hours about procedures for pursuing the senior thesis.

COURSE DESCRIPTION
LIBERAL STUDIES
Symbol: LST

LST 490 Senior Thesis (3-6) Directed research in an interdisciplinary subject of the arts and sciences. For students in the Bachelor of Arts tracks. PREREQ: Permission of the director of liberal studies.

Department of Mathematics and Computer Science

John W. Weaver, *Chairperson*
Frank Milliman, *Assistant Chairperson*

PROFESSORS: Branton, Epstein, Fabrey, Grosshans, Koh, L'Heureux, Mandelbaum, Montemuro, Szymanski, Weaver

ASSOCIATE PROFESSORS: Ahlborn, Gallitano, Gupta, Horvath, Kerrigan, Kline, Milito, Milliman, Morgan, Moser, Schremmer, Seybold, Tan, Verno, Wolfson, Wyatt

ASSISTANT PROFESSORS: Edelman, Horton, Johnston

The Department of Mathematics and Computer Science offers two programs leading to the Bachelor of Arts degree in mathematics, two programs leading to the Bachelor of Science degree in computer and informational sciences, and a program leading to the Bachelor of Science in Education.

1. The B.A. in MATHEMATICS enables each student to receive the basic preparation for the career of his/her choice, such as college teaching, research and other service in industry and government, and computer programming. In all cases, the student receives a sound preparation for graduate study in the field of mathematics.
2. The B.A. in MATHEMATICS – COMPUTER SCIENCE offers the student interested in mathematics and computer science an opportunity to study both disciplines.
3. The B.S. in COMPUTER AND INFORMATION SCIENCES requires course work in computer science, mathematics, and business. In addition, the student gains valuable experience on the job through an internship program with local industry and business. Normally, this program requires attendance during one summer session in addition to the eight academic semesters. The information systems track prepares the student to use the computer as a tool for management in business and industry, leading to a possible career as a systems analyst. The computer systems track prepares the student to engage in the design, development, and effective use of computer systems through emphasis on software and computer system structure, leading to a possible career as a systems programmer.
4. The B.S. in EDUCATION in MATHEMATICS focuses on a heavy concentration in mathematics while the student earns state certification to teach secondary school mathematics.

Majors in all these areas should consult the appropriate department handbook and review with their advisers current requirements listed on the guidance record sheets.

REQUIREMENTS COMMON TO THE B.A. PROGRAMS

1. General Requirements, see pages 35–39	51 semester hours
2. Foreign Language Requirement (French, German, or Russian)	0-12 semester hours
3. Related Requirements CSC 141; PHY 170	7 semester hours
4. Major Requirements MAT 110, 161, 162, 211, 261, 262, 343, 411, and 421	29 semester hours

BACHELOR OF ARTS—MATHEMATICS

1. Additional Major Requirements MAT 232	3 semester hours
2. Electives in Mathematics Selected from upper-division mathematics courses	12 semester hours
3. PHY 180	4 semester hours

BACHELOR OF ARTS—MATHEMATICS WITH COMPUTER SCIENCE CONCENTRATION

1. Additional Major Requirements CSC 142, 241, 242, and 490 (CSC 490 must be taken as a three-credit course); MAT 425	15 semester hours
2. Electives in Mathematics	6 semester hours
3. Electives in Computer Science	6 semester hours

BACHELOR OF SCIENCE—COMPUTER AND INFORMATION SCIENCES

1. General Requirements, see pages 35–39	51 semester hours
2. Core Curriculum	
Computer Science Requirements CSC 141, 142, 241, 242, 361, and five approved language labs	20 semester hours
Mathematics Requirements MAT 161, 162, 221, and 281	15 semester hours
Natural Science Requirements One semester each of three different natural sciences	9 semester hours
Cooperative Experience CSC 300 and 400	13 semester hours
3. Information Systems Track Requirements ACC 201-202; CSC 321; ECO 112; ENG 368; MGT 300; MKT 301; and six semester hours of approved electives in business, computer science, or mathematics	27 semester hours
4. Computer Systems Track Requirements ACC 201; CSC 331 and 341; ENG 368; and nine semester hours of approved electives in computer science and mathematics	21 semester hours

BACHELOR OF SCIENCE IN EDUCATION

1. General Requirements, see pages 35–39	51 semester hours
2. Mathematics Requirements MAT 110, 161, 162, 211, 231, 261, 262, 343, 350, 354 (credited to professional education), 411, and 421	38 semester hours
3. Professional Education Requirements EDF 100; EDM 300; EDP 250 and 351; EDS 306 and 411-412	27 semester hours
4. Related Requirements CSC 141, and PHY 170-180	11 semester hours
5. Electives in Mathematics Selected from upper-division mathematics courses	9 semester hours

Minor in Mathematics — **18 semester hours**

Baccalaureate students may receive transcript recognition for a minor area of study in mathematics by completing four required courses and two electives selected from the approved list.

1. Required Courses 12 semester hours
   MAT 105 or 110, and 161, 162, and 211
2. Approved Electives: Select two 6 semester hours
   MAT 232, 343, 411, or 421

Minor in Computer Science 19 semester hours

Baccalaureate students may receive transcript recognition for a minor area of study in computer science by completing four required courses and two electives in computer science courses numbered 200 or higher, including at least one computer science course numbered 300 or higher.

1. Required courses 13 semester hours
   CSC 141, 142, and MAT 161,
   and either CSC 143 or CSC 241
2. Approved Electives 6 semester hours

In both of the above minors, a student must earn a minimum grade of C– in each course and have an average of at least 2.0 over all the courses taken in the minor.

Advanced Placement Policy

A score of three on the Mathematics Advanced Placement Exam of the College Boards will allow a mathematics major to begin his or her studies with MAT 162. MAT 110 may or may not be taken at the discretion of the student. Students who are granted advanced placement of 4-8 semester hours take 4-8 additional semester hours of electives in mathematics.

COURSE DESCRIPTIONS
MATHEMATICS

Symbol: MAT

MAT 000 Fundamentals of Algebra (3) A preparatory course to remediate basic arithmetic and algebraic skills. Students scoring below 450 on the mathematics section of the Scholastic Aptitude Test (SAT) and who do not pass the mathematics test during their orientation program are placed in this course prior to any other mathematics course. Credits earned in 000-level courses do not count towards the 128 hours of credit needed for graduation. The course must be passed with a grade of C- or better, or be repeated.

001 Fundamental Skills in Arithmetic (3) A course designed to remediate basic arithmetic skills and to introduce elementary algebra. In general, students placed in MAT 001 have scored below 400 on the math SAT and have not taken high school algebra. Students are being prepared to take Fundamentals of Algebra (MAT 000) and must earn at least a C– to enroll in that course. A student in MAT 001 does not earn credit toward graduation for this course. Elementary and special education majors in need of algebraic and/or arithmetic remediation must enroll in MAT 001.

101 Mathematics for Elementary Teachers I (3) Sets; functions; logic; development of whole numbers, integers, and rationals (including ratios, proportions, and percents); number theory; problem solving. For early childhood, elementary education, and special education majors only.

102 Mathematics for Elementary Teachers II (3) Development of real numbers; geometry; measurement; probability and statistics; problem solving. For elementary education and special education majors only. PREREQ: MAT 101.

103 Introduction to Mathematics (3) An introduction to the nature and spirit of mathematics and its cultural significance. Designed for general education.

105 College Algebra and Trigonometry (3) A unified course in algebra and trigonometry. PREREQ: High school algebra.

107 College Algebra (3) A thorough treatment of college algebra. Topics covered include the study of polynomial, exponential, and logarithmic functions, plus systems of linear equations. PREREQ: SAT score of 450 or above, or passing a placement test, or obtaining at least a C- in MAT 000.

108 Survey of Calculus for Business (3) An intuitive approach to the calculus of one and two variables with emphasis on business applications. PREREQ: MAT 105 or MAT 107.

110 Foundations of Mathematics (3) A precalculus course. Topics include polynomials, rational functions, inverse functions, theory of equations, circular functions, arithmetic and geometric series, mathematical induction, and complex numbers.

121 Statistics (3) Basic concepts of statistics. Frequency distributions, measures of central tendency and variability, probability and theroretical distribution, significance of differences, and hypothesis testing. For nonmathematics majors.

MTL 121 Statistics Lab (1) Introduces the student to using and programming the computer to solve statistical problems and to aid the student in understanding statistical concepts. The BASIC language is used.

161 Calculus I (4) Differential and integral calculus of real-valued functions of a single real variable, with applications. PREREQ: Good working knowledge of high school algebra and trigonometry demonstrated by a math SAT score of 650 or above, or a C- or above in MAT 105 or MAT 110.

162 Calculus II (4) Continuation of MAT 161 including the study of series, methods of integration, transcendental functions, and applications to the sciences. PREREQ: MAT 161.

209 Topics in Mathematics for the Elementary Teacher (3) Introduction to programming in BASIC; computer uses for the classroom teacher; descriptive statistics with applications for teaching; and measurements of length, area, volume, and temperature that focus on the SI metric system with practice in the classroom. Additional topics in applied mathematics will be considered. PREREQ: MAT 102. Offered in the fall semester.

211 Linear Algebra (3) An introduction to linear algebra. Topics covered include matrices, systems of linear equations, vector spaces, linear transformation, determinants, eigenvalues, spectral theorem, and triangulation.

212 Algebra for Elementary Teachers (3) Formal structure of groups, rings, and fields with examples from the elementary curriculum. Topics from linear algebra including matrices, determinants, and linear programming. PREREQ: MAT 102.

221 Applied Statistics (3) Probabilities, discrete and continuous probability distributions, methods of estimation, and hypothesis testing. PREREQ: CSC 141 (or equivalent) and MAT 162 (or equivalent).

231 Foundations of Geometry (3) Geometric foundations from an advanced viewpoint. Topics are chosen from euclidean and noneuclidean geometrics. Offered in the spring semester.

232 Differential Geometry (3) Classical differential geometry from a modern viewpoint. Curves and surfaces and shape operators. Introduction to Riemann geometry. PREREQ: MAT 262.

233 Geometry for Elementary Teachers (3) Modern informal approach to two- and three-dimensional geometric figures, measurement, similarity, congruence, coordinate geometry, and the postulational method. PREREQ: MAT 102.

261 Calculus III (3) The calculus of several variables. Topics include polar coordinates, vectors and three-dimensional analytic geometry, differentiation of functions of several variables, multiple integrals, and line and surface integrals. PREREQ: MAT 161 and MAT 162.

262 Calculus IV (3) The calculus of vector-valued functions of a vector variable. Derivatives and properties of the derivative including the chain rule, fields and conservative fields, integration, and Green's, Stokes', and Gauss' theorems. PREREQ: MAT 261.

281 Discrete Mathematics (4) This course is designed to provide a foundation for the mathematics used in the theory and application of computer science. Topics include mathematical reasoning, the notion of proof, logic, sets, relations and functions, counting techniques, algorithmic analysis, modelling, cardinality, recursions and induction, graphs, and algebra. PREREQ: MAT 162.

321 Combinatorics and Graph Theory (3) Introduction to set theory, graph theory, and combinatorial analysis. Includes relations, cardinality, elementary combinatorics, principles of inclusion and exclusion, recurrence relations, zero-one matrices, partitions, and Polya's Theorem. PREREQ: CSC 101 or CSC 141, and MAT 262 or MAT 281.

343 Differential Equations (3) The general theory of nth order, and linear differential equations including existence and uniqueness criteria and linearity of the solution space. General solution techniques for variable coefficient equations, series solutions for variable coefficient equations, and study of systems of linear equations. PREREQ: MAT 261. Offered in the spring semester.

349 Teaching Mathematics in Early Childhood (3) Concepts, learning aids, syllabi, texts, and methods in early childhood mathematical teaching. PREREQ: MAT 101.

350 Foundations of Mathematics Education (3) Historical overview of mathematics education with emphasis on influential curricular programs, implications of learning theory, significance of research, identification of current issues, organizational alternatives for the classroom, and evaluation resources. PREREQ: MAT 261. Offered in the fall semester.

351 Teaching Mathematics in Elementary Schools I (3) Concepts, learning aids, syllabi,

texts, and methods in elementary school mathematics. MAT 101-102.

352 **Teaching Mathematics in Elementary Schools II** (3) Techniques for teaching children concepts such as geometry in two and three dimensions, number sentences, graphing, ratios and percentages, quantifiers, etc. Use of laboratory materials will be emphasized. PREREQ: MAT 351. Offered in the spring semester.

354 **Techniques of Teaching Secondary School Mathematics** (3) Techniques used in the presentation of specific mathematical concepts, associated materials, levels of questioning, and motivational devices. Scope and sequence of secondary mathematics topics. Criteria for text evaluation. Preview of student teaching. PREREQ: MAT 350. Usually offered in the spring semester.

357 **Teaching Mathematics to the Handicapped** (3) Methods and materials associated with the presentation of mathematics to the handicapped. Emphasis on individualization and involving thinking skills at the concrete level. Evaluative and interpretive techniques are included. PREREQ: MAT 101-102.

◆ 390 **Seminar in Mathematics Education** (3) Typical topics are remedial programs, low achiever programs, materials for mathematics education, methodology in mathematics education, mathematics and the computer, theories of mathematics education, and analysis of research in mathematics education. PREREQ: MAT 351.

400 **History of Mathematics for Elementary Teachers** (3) History and development of elementary mathematics from primitive times to the discovery of calculus. Problems of the period are considered. PREREQ: MAT 212, 233.

401 **History of Mathematics** (3) Development of mathematics from the Babylonian era to the 18th century. Some modern topics included. PREREQ: MAT 261.

◆ 405 **Special Topics in Mathematics** (3) Topics announced at the time of offering.

411-412 **Algebra I-II** (3) (3) Abstract algebra. Algebraic systems, groups, rings, integral domains, and fields. PREREQ: MAT 261. MAT 411 must precede 412.

414 **Theory of Numbers** (3) Properties of integers; primes, factorization, congruences, and quadratic reciprocity. PREREQ: MAT 262.

421-422 **Mathematical Statistics I-II** (3) (3) Probability theory, discrete and continuous random variables, distributions, and moment generating functions. Statistical sampling theory, joint and interval estimation, test of hypothesis, regression, and correlation. PREREQ: MAT 262. MAT 421 must be taken before 422.

425 **Numerical Analysis** (3) Numerical methods for the approximate solution of applied problems. Interpolation theory, curve fitting, approximate integration, and numerical solution of differential equations. PREREQ: CSC 115 or 141, and MAT 262.

427 **Introduction to Optimization Techniques** (3) Nature of optimization problems: deterministic and stochastic, and discrete and continuous. Computer methods of solution, systematic and random search, linear quadratic, dynamic programming, and others. PREREQ. CSC 115 or 141, and MAT 262.

432 **Topology** (3) Elements of point set topology. Separation axioms. Connectedness, compactness, and metrizability PREREQ: MAT 262.

441-442 **Advanced Calculus I-II** (3) (3) A rigorous treatment of the calculus of a single real variable. Topics in several real variables and an introduction to Lebesque integration. PREREQ: MAT 262. MAT 441 must be taken before 442.

443-444 **Applied Analysis I-II** (3) (3) The techniques of analysis applied to problems in the physical sciences. Topics include partial differential equations, orthogonal functions, complex integration, and conformal mapping. PREREQ: MAT 262. MAT 443 must be taken before 444.

445 **Complex Variables** (3) Introduction to functions of a complex variable. Analytic functions, mappings, differentiation and integration, power series, and conformal mappings. PREREQ: MAT 262.

◆ 490 **Seminar in Mathematics** (3) Topics in mathematics selected for their significance and student-instructor interest. Independent study and student reports, oral and written. PREREQ: Senior standing and consent of department chairperson.

493 **Mathematical Modeling** (3) The idea of a mathematical model of a real situation. Techniques and rationales of model building. Examples from the life, physical, and social sciences. PREREQ: MAT 262 and 343.

COMPUTER SCIENCE

Symbol: CSC

★ 101 **Introduction to Computers (nonmajors)** (3) A course for nonmajors dealing with what computers are, what they can do, and how they are used. A brief history of computers and the societal implications of computer usage. A brief introduction to a programming language is provided along with hands-on experience using word processing, database, and spreadsheet programs.

★ 115 **Introduction to Computer Programming (nonmajors)** (3) The art and science of computing are introduced with an emphasis on structured programming. Topics include looping, branching, arrays, and program development.

★ 141 **Introduction to Computer Science** (3) Introduction to the art and science of computing and its applications. Topics include structured programming, algorithmic development, decisions, loops, procedures, functions, parameter passing, arrays, and files. Several programs are written by each student. At present, Pascal is the language used. PREREQ: Two years of high school algebra.

142 **Applied Software** (3) Techniques of program design, documentation, and implementation are studied using the structured language in CSC 141. Topics include the number system, internal data storage, recursion, sets, strings, pointers, and different types of files. PREREQ: CSC 141.

143 **Applied Object-Oriented Programming** (3) A study of the object-oriented programming paradigm using C++ for students having an introductory knowledge of C++. PREREQ: CSC 141, 142, and an introductory knowledge of C++.

202 **Programming Language Lab — BASIC** (1) Introduction to BASIC with an emphasis on programming. PREREQ: CSC 141 and MAT 161. Offered in fall of even-numbered years.

203 **Programming Language Lab — APL** (1) Introduction to APL with an emphasis on programming. PREREQ: CSC 141 and MAT 161. Offered in spring of even-numbered years.

204 **Programming Language Lab — FORTRAN** (1) Introduction to FORTRAN with an emphasis on programming. PREREQ: CSC 141. Offered in fall of odd-numbered years.

206 **Programming Language Lab — MODULA-2** (1) Introduction to the MODULA-2 programming language. PREREQ: CSC 141 and 142. Offered as needed.

207 **Programming Language Lab — C** (1) Introduction to the C programming language. PREREQ: CSC 141, 142, and 241 (CSC 242 recommended). Offered in the fall semester.

208 **Programming Language Lab-Forth** (1) Introduction to the Forth programming language. PREREQ: CSC 141. Offered as needed.

209 **Programming Language Lab — List Processing** (1) Programming skills are developed in a list processing language such as LOGO and/or LISP. PREREQ: CSC 141, 142. Offered in spring of odd-numbered years.

210 **Programming Language Lab — Software Packages** (1) Skills are developed in the use of various software packages, e.g., spreadsheet, database, and graphing. PREREQ: CSC 141. Offered in the spring semester.

211 **Programming Language Lab — COBOL** (1) Programming skills are developed in the COBOL language. PREREQ: CSC 141 or 115. Offered as needed.

212 **Programming Language Lab — Advanced COBOL** (1) Continuation of CSC 211. PREREQ: CSC 211. Offered as needed.

215 **Programming Language Lab—PROLOG** (1) Introduction to logic programming using PROLOG. PREREQ: CSC 141 and 142. Offered as needed.

216 **Programming Language Lab—MODEL 204** (1) Introduction to programming in a data base environment using Model 204 DBMS. PREREQ: CSC 241 and 321. Offered as needed.

241 **Data Structures** (3) A study of data structures and algorithms for their manipulation using Pascal. Topics include stacks, queues, linked lists, trees, graphs, multiway search trees, B-trees, sorting, and searching. PREREQ: CSC 141, 142, and MAT 161 (MAT 281 is recommended).

242 **Computer Organization** (3) Study of the architecture of a computer system and its native language. Use of assembler language and interfacing with higher level languages is included. PREREQ: CSC 141, 142, and MAT 161 (CSC 241 recommended), or permission of instructor.

300 **Cooperative Programming** (4) The student works in the application programming section of an information systems group as a junior programmer to gain experience in programming and implementing small projects of use to the company. PREREQ: Written approval of the computer science internship supervisor; CSC 141, 142, 241, and 242; MAT 161 and 162; at least two programming language labs; a 2.50 in CSC; and a 2.00 in MAT (WCU classroom courses). Offered summer pre-session only.

311 **Object-Oriented Programming** (3) A study of the object-oriented paradigm. An object-oriented language, usually C++, is studied in detail. Object-oriented design methods are discussed and applied. PREREQ: CSC 141, 142, and 242 (or a working knowledge of C).

321 **Database Management Systems** (3) Characteristics of generalized data management systems; survey of widely used systems; techniques for improving the interface between a manager and information needed to make decisions through easy-to-use, generalized, reporting systems. PREREQ: CSC 142 and 241. Offered in fall and spring semesters.

331 **Operating Systems I** (3) Operating systems and their user characteristics. Maintenance of a complex operating system with emphasis on

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◆ This course may be taken again for credit.
★ Approved distributive requirement course.

important tradeoffs made in tuning the system. Core and file management, systems accounting and security, and other user-related services. PREREQ: MAT 221 and 281; CSC 241, 242, and 361.

332 Operating Systems II (3) A modularly constructed UNIX operating system that uses the object-oriented programming techniques of message passing is studied. Topics covered are process control and management, memory management, file management, systems accounting, and systems security. PREREQ: CSC 331.

335 Data Communications I (3) An overview of the various aspects of modern data and telecommunications. Discussion of the hardware and software facets of the transmission of information in the forms of voice, data, text, and image. Topics include communication protocols, transmission technologies, analog/digital transmissions, communications media, public data networks, LANS, and ISDN. PREREQ: CSC 141, 142, and 241.

336 Data Communications II (3) An in-depth study of some aspects of modern data communication systems. Discussion of the network implementation and design, serial port communications, and user interfaces. Topics include nd image, topics queuing theory, PC serial port hardware and software, interrupt programming, PC communication protocols, and user interface design. PREREQ: CSC 335.

341 Compiler I (3) Translation, loading, and execution of a higher level language. Syntax analysis of simple expressions and statements. Organization of a compiler, and design and implementation of a simple compiler. PREREQ: CSC 241 and 242, and MAT 281.

342 Compiler II (3) An in-depth study of syntax directed analysis, error recovery, and code optimization. Compiler language features. PREREQ: CSC 341.

343 Formal Languages (3) A study of the various types of automata and their associated languages. This course is designed to give a student an understanding and appreciation of the production system for languages and their relationship to automata. PREREQ: CSC 241 and 242, and MAT 221 and 281. Offered in fall of even-numbered years.

350 Computers in Education (3) (nonmajors) Technical knowledge and skills for successful use of the computer as a supportive tool for education in elementary and secondary school classes. Includes hands-on experience using word processing, database, spreadsheet, and elementary desktop publishing. Software evaluation techniques are learned using both utility and subject-matter software. Usually offered in summer sessions.

361 Simulation (3) Computer simulation using logical and numerical modeling to represent systems. Use of special languages to simulate actual systems. PREREQ: CSC 241, MAT 281 (or MAT 262), and MAT 221 (or equivalent).

371 Computer Graphics (3) Construction and manipulation of prototypes for graphical display purposes. PREREQ: CSC 241, MAT 281 (or MAT 262), and MAT 211 (or permission of instructor). Offered in spring semester.

381 Artificial Intelligence (3) Thorough study and analysis of the LISP language in its application to non-numeric problems and symbol manipulations. Application to gaming, scene analysis and pattern recognition, linguistic analysis and semantic representation, image analysis and solution spaces, and problem solving and attention control. Each student is required to take one substantial problem and solve it using the LISP language and the techniques of artificial intelligence. PREREQ: CSC 241 and 242, and MAT 162 and 281. Offered in fall of odd-numbered years.

385 Expert Systems (3) Using the techniques of artificial intelligence and formal logic, methods are developed to establish knowledge bases and to extract inferences. Topics covered are backward and forward chaining, search methods, and frames and slots. PREREQ: CSC core and MAT 281.

400 Cooperative Specialty (9) Working for an organization in his or her concentration area, the student applies his or her background to real problems. PREREQ: Written permission from computer science internship supervisor, a 2.50 in CSC, a 2.00 in MAT (in WCU classroom courses), five programming languages labs, and completion of degree requirements during semester of registration.

402 Software Engineering (3) The purpose of this course is to introduce students to problems associated with programming large projects. Emphasis is on project planning, requirement analysis, software quality assurance, testing, and maintenance. Students work in groups on a large project. PREREQ: CSC core and CSC 300.

490 Independent Project in Computer Science (1-5) The student designs and implements a software system. Project problems are drawn from local industry and university departments. A computer science faculty member supervises each project. PREREQ: Permission of instructor.

◆ 495 Topics in Computer Science (3) Announced at time of offering. PREREQ: Permission of instructor. Offered as needed.

499 Independent Study in Computer Science (1-4) In conjunction with the instructor, the student selects study topics via literature search. PREREQ: Permission of instructor.

◆ This course may be taken again for credit

Department of Philosophy

George S. Claghorn, *Chairperson*

PROFESSORS: Claghorn, Croddy, Platt, Riukas, Streveler, Struckmeyer

ASSOCIATE PROFESSORS: Banyacski, Williams

ASSISTANT PROFESSORS: Hoffman, Porritt

The Department of Philosophy offers two programs leading to the Bachelor of Arts degree and, in cooperation with the faculty of teacher education, a program leading to the Bachelor of Science in Education.

1. The B.A. in PHILOSOPHY surveys the history of philosophy, explores its major disciplines, and focuses on selected topics of perennial interest. The purpose of the program is to develop the organizational, analytic, and expressive skills required for law school, the seminary, graduate work in philosophy, and the wide range of careers in government, business, and industry.
2. The B.A. in PHILOSOPHY—RELIGIOUS STUDIES is designed for students planning on religious vocations, or as a foundation for graduate work in religion or cross-cultural studies. The emphasis is on individual and social expression of religion, Western and non-Western, philosophic implications, and fine arts applications.
3. The B.S. in EDUCATION in SOCIAL STUDIES is for students interested in pursuing a concentration in philosophy while earning state certification to teach secondary school social studies.

Majors in the two B.A. programs should consult the department handbook and their adviser for current requirements.

During the freshman year, students planning to pursue the B.S. in Education in social studies should consult with their adviser in this department and their professional studies adviser in secondary education.

REQUIREMENTS COMMON TO THE B.A. PROGRAMS

1. General Requirements, see pages 35–39	44-51 semester hours
2. Foreign Language/Culture Requirement	0-15 semester hours
3. Major Requirements	24 semester hours
4. Free Electives	38-60 semester hours

BACHELOR OF ARTS—PHILOSOPHY

1. Required Core Courses (PHI 190, 270, 272, 412, and 499)	15 semester hours
2. Philosophy Electives	9 semester hours

BACHELOR OF ARTS—PHILOSOPHY—RELIGIOUS STUDIES

1. Required Courses (PHI 102, 202, 203, 204, 271, 349, and SOC 344)	21 semester hours
2. Elective in Religious Studies As advised	3 semester hours

BACHELOR OF SCIENCE IN EDUCATION—SOCIAL STUDIES: CONCENTRATION IN PHILOSOPHY

Students interested in teaching secondary school may pursue a concentration in philosophy while earning state certification and the Bachelor of Science in Education. See description under "Social Studies: B.S. in Education," page 116.

Minor Programs

Students may minor in either philosophy or religious studies. A minimum of 18 semester hours is required. Elective courses are selected in consultation with the student's minor adviser. Either of these minors may be taken as a concentration in the Bachelor of Arts in liberal studies general degree program.

Philosophy Minor — **18 semester hours**

1. Required Courses (PHI 101, 150 or 190, 174 or 180, and 270, 271, or 272) — 12 semester hours
2. Philosophy Electives, under advisement — 6 semester hours

Religious Studies Minor — **18 semester hours**

1. Required Courses (PHI 102, 202 or 203, 204 or 205, and 349) — 12 semester hours
2. Religious Studies Electives, under advisement — 6 semester hours

COURSE DESCRIPTIONS
PHILOSOPHY

Symbol: PHI

NOTE: Only PHI 405, 412, 436, and 499 have prerequisites. All other philosophy courses are nonsequential and open to all students. Not all courses will be offered every year.

INTRODUCTORY COURSES IN PHILOSOPHY AND RELIGION

★ 101 **Introduction to Philosophy** (3) The chief problems and methods of philosophic thought, with a survey of some typical solutions. The place and influence of philosophy in life today. Offered every semester.

#102 **Introduction to Religious Studies** (3) The role of religion in human life. Illustrations drawn from various traditions, rituals, and belief patterns, both ancient and modern.

150 **Critical Thinking and Problem Solving** (3) Introduction to the principles of valid inference and effective thinking. Problem solving; puzzles; games; decision making; the syllogism; probability; logical fallacies; and creative thinking.

#174 **Principles of the Arts** (3) Contrasting systems for the analysis and evaluation for works of art—literature, the visual arts, and music.

★ 180 **Introduction to Ethics** (3) Great ethical systems of history and their application to personal and social life. The right and the good; the nature of values; and critical ethical dilemmas.

207 **Philosophies of Nonviolence** (3) The theory and practice of nonviolent action. Gandhi, Tolstoy, and King are studied, along with lesser-known figures such as Gene Sharp, Thomas Merton, and A.J. Muste.

#SSC 200 **Introduction to Peace and Conflict Studies** (3) An interdisciplinary study of the causes and functions of societal conflict and processes of controlling conflict.

COURSES IN THE HISTORY OF PHILOSOPHY

■ 270 **History of Ancient Philosophy** (3) A survey of the major figures of ancient philosophy, from the pre-Socratic period through Plato, Aristotle, the Epicureans, and Stoics, to the Skeptics and Neo-Platonists. Offered in fall semester.

271 **History of Medieval Philosophy** (3) The history of philosophy from the early Church fathers to the late Middle Ages. St. Augustine, St. Thomas, mysticism, Jewish and Mohammedan influences, humanism, and the rise of science.

■ 272 **History of Modern Philosophy** (3) From Descartes to Hegel. The social, political, and scientific impact of the philosophers. Offered in spring semester.

■ 273 **19th-Century Philosophy** (3) Hegel and German Idealism; decisive influences on European and American literature and thought. Survey of the chief themes of Schopenhauer, Comte, Mill, Spencer, Marx, Kierkegaard, Darwin, and Nietzsche.

274 **Contemporary Analytic Philosophy** (3) Philosophic trends since 1850, including the process philosophy, Pragmatism, Positivism, Existentialism, and the Analytic School.

284 **American Philosophy** (3) Leaders in science, literature, religion, and government who have shaped American thought. Philosophers of Puritanism, the Revolution, Transcendentalism, and native schools of Realism, Idealism, and Pragmatism.

■ 415 **Existentialism** (3) The rise and development of Existentialism; chief exponents; views of man; and influence on ethics, literature, and social action.

COURSES ON OTHER PHILOSOPHICAL TOPICS

190 **Logic** (3) Introduction to symbolic logic. The nature of logical arguments; truth-functional propositions; validity; natural deduction; and simple quantification. Offered every semester.

◆ 201 **Contemporary Issues** (3) Discussion and analysis of contemporary philosophical issues of particular concern to students. The topic varies from semester to semester.

#330 (also LIN 330) **Introduction to Meaning** (3) Relationship between linguistics and philosophy with emphasis on meaning in language. Some issues in the theory of meaning from both linguistics and philosophy; materials from each field to help solve these issues.

360 (also LIN 360) **Philosophy of Language** (3) Questions of meaning in communication. Emphasis on contemporary discussions of theories of natural language.

#370 **Biomedical Ethics** (3) A survey of basic ethical theories with application to contemporary ethical issues. Rights and responsibilities; the definition of life; and biomedical research.

380 **Environmental Ethics** (3) Ethical issues and duties relating to the natural environment; animal rights; and community issues, including overpopulation, pollution, and distribution of resources.

382 **Social Philosophy** (3) The relation between man and the state, especially as seen by recent thinkers. Justice, natural rights, political obligation, freedom, and equality.

#405 **Feminist Theory** (3) Designed to introduce and discuss basic questions in contemporary feminist theory, the course will explore different philosophies of feminism, including such issues as motherhood, intersections with other theories of oppression, and body politics. PREREQ: WOS 225 or permission of instructor.

412 **Ethical Theories** (3) Advanced course in ethical theory, stressing applications. PREREQ: PHI 180 or permission of the instructor.

413 **Aesthetic Theories** (3) Interpretation of beauty and art. Effects of motivation, and problems in media and in goals. A background of meaning for the evaluation of specific works of painting, sculpture, music, and architecture.

414 **Philosophy of Religion** (3) Religion and the religious experience as viewed by major Western thinkers. The existence of God, immortality, religious knowledge, evil, miracles, and science and religion.

422 **Philosophy of Science** (3) The nature of scientific method and scientific theory, with reference to presuppositions, inference, explanation, prediction, applications, and verification.

436 **Symbolic Logic** (3) Principles and methods of symbolic logic. Practice in determining validity of sentential and quantificational arguments. The algebra of classes. PREREQ: PHI 190 or permission of the instructor.

483 **Philosophy of History** (3) Classic philosophies of history, including those of Augustine, Vico, Hegel, Marx, Spengler, Toynbee, and Collingwood. Definitions of civilization, norms of progress and decadence, determinism and indeterminism, causality, and pattern.

COURSES IN RELIGION

202 **Religions of the West I** (3) A survey of the thought of Christianity and Judaism to the year 500.

203 **Religions of the West II** (3) A survey of the thought of Christianity, Islam, and Judaism, from the year 500 to the present. Emphasis on theological development, with attention to social, economic, and historical factors.

204 **Philosophies and Religions of India** (3) The religious and philosophical heritage of India, from Vedic times to the present. Examination of major classics, such as Rig Veda, Upanishads, Bhagavad-Gita, and Yoga-sutras; recent writers such as Tagore, Gandhi, and Radhakrishnan.

205 **Philosophies and Religions of the Far East** (3) A survey of Far Eastern philosophy, religion, and scientific thought. Confucianism, Taoism, and the various schools of Mahayana Buddhism, including Zen, are given primary emphasis.

★ Approved distributive requirement course
Approved interdisciplinary course.
■ Culture Cluster

349 Ideas of the Bible (3) An introduction to Biblical concepts of revelation, God, man, nature, and redemption in light of Hebrew and Greek thought.
414 Philosophy of Religion (3) See "Courses in Philosophical Topics," above.

INDEPENDENT STUDIES AND SEMINARS
◆ 410 Independent Studies (1-3)
◆ 499 Philosophic Concepts and Systems (3) An intensive study of the major works of one philosopher, stressing themes and comparison with other views. Required of all philosophy majors. PREREQ: Six hours of philosophy and senior standing, or permission of instructor.

◆ This course may be taken again for credit.

Department of Physics and Pre-Engineering Program

Harold L. Skelton, *Chairperson*

PROFESSOR: Smith

ASSOCIATE PROFESSORS: Hawkes, Kaplan, Martens, Nicastro, Skelton

INSTRUCTOR: Holder

The Department of Physics offers three undergraduate degree programs: the Bachelor of Science in physics, the Bachelor of Science in Education, and a cooperative five-year engineering program with Pennsylvania State University.

For admission to the physics program, most students should have completed, in addition to the general University requirements, one year each of high school chemistry and physics, and a minimum of three years of mathematics, including algebra and trigonometry. Any student with a deficiency must complete ENG 120 and MAT 161 with grades of C– or better to be admitted to the program.

West Chester has a chapter of the national physics honor society, Sigma Pi Sigma.

A minor program in physics also is available.

BACHELOR OF SCIENCE—PHYSICS

This program is designed as preparation for graduate school or careers in government or industry. The curriculum includes a strong foundation in mathematics and the humanities. A wide choice of electives in the program provides the flexibility to develop a minor in an area of interest.

Requirements

A. PHYSICS: PHY 170, 180, 240, 300, 310, 320, 330, 350, 420, and 430; an additional six credits in physics must be chosen from available electives at or above the 300 level
B. MATHEMATICS: CSC 141; MAT 161, 162, 261, 262, and 343
C. CHEMISTRY: CHE 103 and 104; CRL 103 and 104

Candidates for the B.S. in physics must satisfy a foreign language requirement at the 102 level. In physics, the recommended languages are French, German, or Russian.

Students must maintain a GPA of 2.00 or greater in their physics courses. Transfer students must take 15 or more physics credits at West Chester at the 300 level and above for graduation.

BACHELOR OF SCIENCE IN EDUCATION—PHYSICS

The B.S. program in physics education provides a solid background in physics, mathematics, and related science for a teaching career at the secondary level and leads to certification to teach physics in the public schools of Pennsylvania.

1. Physics Concentration Requirements
   A. PHYSICS: PHY 170, 180, 240, 300, 310, 320, 330, and 410 or 430
   B. MATHEMATICS: MAT 161, 162, 261, and MAT 343 or PHY 370
   C. SCIENCES: CHE 103 and 104; CRL 103 and 104; SCB 350; and an elective in astronomy, biology, and computer science
2. Professional Education Requirements (See page 112.)

Students must maintain a GPA of 2.00 or greater in their physics courses. Transfer students must take nine or more physics credits at West Chester at the 300 level and above for graduation.

BACHELOR OF SCIENCE—PHYSICS/BACHELOR OF SCIENCE—ENGINEERING

The Department of Physics offers a cooperative engineering program with Pennsylvania State University, requiring three years at West Chester University plus two years at Pennsylvania State University for study in engineering. At the end of this period, the student receives two baccalaureate degrees: a B.S. in physics from West Chester and a B.S. in engineering from Penn State.

Admission to Pennsylvania State University is contingent on a recommendation from the Department of Physics and the student having maintained the overall average for the specific engineering major.

Students who have completed a bachelor's degree are not eligible for transfer to Penn State in this program.

Areas of study in engineering are:

Aerospace Engineering
Agricultural Engineering
Ceramic Science
Chemical Engineering
Civil Engineering
Electrical Engineering
Engineering Science
Environmental Engineering
Industrial Engineering
Mechanical Engineering
Metallurgy
Mining Engineering
Nuclear Engineering
Petroleum and Natural Gas Engineering

Physics Concentration Requirements

A. PHYSICS: PHY 115, 116, 170, 180, 240, 260, 300, 310, 320; an additional six credits in physics at or above the 300 level must be chosen, depending on the engineering area selected
B. MATHEMATICS: CSC 141; MAT 161, 162, 261, 262, and 343
C. CHEMISTRY: CHE 103 and 104; CRL 103 and 104

In addition, students intending to enroll in chemical engineering must have CHE 231 and 232; in mining engineering, ESL 201, and ESS 101 and 302; and in petroleum and natural gas engineering, ESL 201, and ESS 101 and 203. Students intending to enroll in aerospace, electrical, or nuclear engineering must take PHY 370 and PHY 420.

Minor in Physics 19 semester hours

The program can be used as technical preparation to complement work in other scientific or nonscientific areas, e.g., business majors interested in careers in technologically oriented industries, majors interested in technical or scientific sales, English majors interested in technical writing, or social science majors interested in the area of energy and the environment.

Required: PHY 130 and 140, or PHY 170 and 180; also PHY 240. In addition, students must select eight credits of physics courses at the 300 level or above, chosen under advisement with the Department of Physics. Transfer students must take a minimum of six credits at West Chester at the 300 level or above. A 2.00 GPA or better must be maintained in all physics courses.

COURSE DESCRIPTIONS
PHYSICS

Symbol: PHY
(3,2) represents three hours of lecture and two hours of lab.

★ 100 Elements of Physical Science (3) A study of motion, energy, light, and some aspects of modern physics.

110 Acoustics for Speech and Hearing (3) Nontechnical introduction to acoustics. Waves and acoustical wave propagation, wave superposition, the acoustical spectrum, human voice tract as a sound source, and the human ear as a receptor.

115 Engineering Graphics I (1) Use and preparation of engineering drawings. Topics include the use of instruments, linework, geometric construction, lettering, four types of projections, dimensioning, and sections.

116 Engineering Graphics II (1) A continuation of PHY 115, to include topics such as layout, detail, and assembly drawings, developments, auxiliary drawings, various types of drafting, machine tool processes, and computer drafting. PREREQ: PHY 115.

†130 General Physics I (4) An introductory, noncalculus, physics course. Mechanics of solids and fluids, wave motion, heat and temperature, thermodynamics, and kinetic theory. (3,2) PREREQ: Algebra and trigonometry.

†140 General Physics II (4) An extension of PHY 130. Electricity and magnetism, geometrical and physical optics, and modern physics. (3,2) PREREQ: PHY 130.

†170 Physics I (4) An introductory course. Mechanics of solids and fluids, heat, temperature, thermodynamics, the kinetic theory, and wave motion. (3,2, one-hour recitation) PREREQ: MAT 161.

†180 Physics II (4) An extension of PHY 170. Electricity and magnetism, geometrical and physical optics, and modern physics. (3,2, one-hour recitation) PREREQ: PHY 170. CONCURRENT: MAT 162.

240 Introduction to Modern Physics (3) An atomic view of electricity and radiation, atomic theory, special relativity theory, X-rays, radioactivity, nuclear fission, and introductory quantum mechanics. PREREQ: PHY 140 or 180, and MAT 162.

260 Engineering Statics (3) Composition and resolution of forces, equivalent force systems, equilibrium of particles and rigid bodies, centroids and center of gravity, analysis of simple structures, internal forces in beams, friction, moments and products in inertia, and methods of virtual work. PREREQ: PHY 130 or 170, and MAT 162.

300 Mechanics (3) Particle kinematics, dynamics, energy, and momentum considerations; oscillations; central force motion; accelerated reference frames; rigid body mechanics; Lagrangian mechanics. PREREQ: PHY 140 or 180, and MAT 162.

310 Intermediate Physics Laboratory I (2) A course to familiarize students with laboratory equipment and methods. PREREQ: PHY 240.

320 Intermediate Physics Laboratory II (2) A continuation of PHY 310. PREREQ: PHY 310.

330 Electronics I (3) Emphasis is divided between theory and experiment. The course begins with a brief review of resistive and RC voltage dividers. Electronic circuits studied include basic operational amplifiers, timers, instrumentation amplifiers, logic circuits, flip flops, counters, and timers. (2,2) PREREQ: PHY 140 or 180, and MAT 161, or permission of instructor.

340 Fundamentals of Radioisotope Techniques (3) Biological, chemical, environmental, and physical effects of nuclear radiation. Radiation detection instrumentation and radio tracer methodology (2,2) PREREQ: CHE 104, and PHY 140 or 180.

350 Heat and Thermodynamics (3) Equations of state, first and second laws of thermodynamics, ideal and real gases, entropy, and statistical mechanics. PREREQ or CONCURRENT: PHY 240 and MAT 262.

370 Mathematical Physics (3) Selected topics in mathematics applied to problems in physics, ordinary differential equations, vector calculus, Fourier analysis, matrix algebra, and eigenvalue problems. PREREQ: MAT 261, and PHY 140 or 180.

400 Analytical Dynamics (3) Wave propagation, Lagrange's equations and Hamilton's principle, rigid body motion, and special relativity. PREREQ: MAT 343 and PHY 300.

410 Optics (3) Geometrical and physical optics. Reflection and refraction at surfaces, lenses, interference and diffraction, and polarization. PREREQ: PHY 140 or 180. PREREQ or CONCURRENT: MAT 262.

420 Atomic Physics and Quantum Mechanics (3) Fundamental concepts of quantum mechanics with application to atomic physics. Topics covered are Bohr model, Schrodinger equation with applications, perturbation theory, helium atom, and scattering theory. PREREQ: PHY 240 and 300, and MAT 343 or PHY 370.

430 Electricity and Magnetism (3) Electrostatics of point charges and extended charge distributions, fields in dielectrics, and magnetic fields due to steady currents. Ampere's Law and induced emfs. Topics in electromagnetic waves as time permits. PREREQ: PHY 300, and MAT 343 or PHY 370.

440 Microcomputer Electronics (3) Laboratory study of special circuits, integrated circuits, microcomputers, and microcomputer interface applications. PREREQ: PHY 330, and MAT 343 or PHY 370.

450 Advanced Physics Laboratory I (1) A course to familiarize students with contemporary laboratory equipment and methods.

460 Advanced Physics Laboratory II (1) A continuation of PHY 450.

470 Seminar in Physics (1) Oral and written reports on approved topics. Variation in topics from year to year, depending on the interest and needs of students.

◆ 480 Special Topics (1-3) Topics of special interest to be presented once or twice. PREREQ: To be specified by the instructor. Course may be repeated by student for credit any number of times when different topics are presented

490 Introduction to Research (1-9) Specific problems in consultation with the faculty adviser. PREREQ: Permission of instructor.

#SCB 210 The Origin of Life and the Universe (3) An interdisciplinary course that presents the theory and evidence for the first three minutes of the universe, and formation of the stars, galaxies, planets, organic molecules, and the genetic basis of organic evolution. PREREQ: High school or college courses in at least two sciences.

★ Approved distributive requirement course.
† PHY 170-180 and PHY 130-140: Approved two-semester requirement substitutes.
◆ This course may be taken again for credit.
Approved interdisciplinary course.

Pre-Medical Program

Philip Rudnick, *Director*
Elise Triano, *Assistant Director*

COMMITTEE MEMBERS

Melissa Cichowicz, *Chemistry*
Marianne Eleuterio, *Biology*
Andrea Fishman, *English*
Andrew Goudy, *Chemistry*
Anthony Nicastro, *Physics*
Philip Rudnick, *Chemistry*
Paul Streveler, *Philosophy*
Elise Triano, *Biology*
Ralph Verno, *Mathematics*

The pre-medical program prepares students for application to the health professional schools of medicine, dentistry, optometry, podiatry, chiropractic medicine, and veterinary medicine, and for careers in biomedical research. Supervised by a Pre-Medical Committee, the program consists of an individualized selection of course work, personal counseling beginning in the freshman year, and for those students eligible, junior-year biomedical research at an outside research institute. Students with majors other than chemistry-biology (pre-medical) are required to have two advisers—one from their major field and one from the Pre-Medical Committee.

Because of the intense competition for health professional school admission, only academically talented and highly motivated students should apply to the pre-medical program. Applicants are selected on the basis of their potential for achievement in the program. Students in the program must maintain a minimum 3.00 Grade Point Average and the high standards of performance necessary for health professional school admission.

It is essential for incoming students contemplating a medical career to register with the Pre-Medical Office immediately upon

matriculation at the University. Similarly, it is essential for students who at some later time develop an interest in a medical career to register with the Pre-Medical Office. Students who fail to consult with the Pre-Medical Office prior to taking the Medical College Admissions Test (MCAT) or who fail to report the results of any MCAT exam to the Pre-Medical Office forfeit the privilege of receiving a Pre-Medical Committee letter of evaluation when they apply to medical school.

All West Chester students who wish to apply to a health professional school should ask their professors to forward letters of evaluation to the Pre-Medical Committee and *should process their applications through the committee.* The committee will send a composite letter of evaluation to the professional school. *Except for special circumstances, no letters of recommendation should be sent directly to professional schools.*

Further information is available in the Pre-Medical Office, Room 161 Schmucker Science Center.

CONCENTRATION AND CORE REQUIREMENTS FOR CHEMISTRY-BIOLOGY (PRE-MEDICAL) CURRICULUM

BACHELOR OF SCIENCE — CHEMISTRY-BIOLOGY (PRE-MEDICAL)

1. General Requirements, see pages 35–39 — 29 semester hours
   Includes six semester hours of English composition
2. Biology — 24 semester hours
   BIO 110, 217, 230, 357, 448, and 468
3. Chemistry — 30 semester hours
   CHE 103, 104, 231, 232, 321, 345, and 471
   CRL 103, 104, 232, and 321 or 471
4. Concentration Elective, Biology or Chemistry — 3 semester hours
5. Mathematics — 13-14 semester hours
   CSC 115, 141 or equivalent
   MAT 121, 161, 162
   (Students who start with MAT 105 and participate in a full-time, one-semester research internship may substitute MAT 105 and 161 for MAT 161 and 162.)
6. Physics — 8 semester hours
   PHY 170
   PHY 180
7. Free Electives — 20-21 semester hours

See also Chemistry.

Department of Psychology

Edward Pollak, *Chairperson*
Philip Duncan, *Assistant Chairperson*

PROFESSORS: Crawford, Duncan, Kumar, Moore, Morse, Pollak, J. Porter, L. Porter, Sands, Smith, Treadwell

ASSOCIATE PROFESSORS: Bloom, Mahlstedt, Shinehouse

ASSISTANT PROFESSORS: Bonifazi, McConatha, Renner

ADJUNCT PROFESSORS: Gilbert, Pekala

The Department of Psychology offers bachelor's degrees in three areas of concentration.

1. The B.A. in PSYCHOLOGY prepares the student to understand those variables, such as heredity, learning, and the environment, which shape and change behavior. Careers are possible in clinics, guidance centers, industry, hospitals, schools, and government. Students should consult their advisers concerning recommended preparations for specific career goals. This program also will prepare the student for postgraduate study.
2. The B.A. in PSYCHOLOGY: COGNITIVE REHABILITATION CONCENTRATION provides training for cognitive rehabilitation therapists. Such therapists work with patients who have suffered brain trauma following an accident or stroke. The therapist will carry out a treatment program designed to facilitate the recovery of cognitive functions such as memory, reasoning, judgment, etc. The cognitive rehabilitation therapist typically works under the supervision of a doctoral-level clinical neuropsychologist. This program also will prepare the student for postgraduate study.
3. The B.S. in EDUCATION program prepares students to teach the social sciences in the secondary schools.

BACHELOR OF ARTS—PSYCHOLOGY

1. General Education Requirements, see pages 35–39 — 47-51 semester hours
   Includes PSY 100. MAT 103 is required. BIO 100 and CSC 101 are strongly recommended for partial completion of the science requirement.
2. Foreign Language/Culture Requirement, see page 38. — 3-15 semester hours
3. Department Requirements — 36 semester hours
   A. Required Psychology Courses (21 semester hours)
      PSY 245, 246, and 400. Students must choose two courses from Group I and two courses from Group II.
      Group I
      PSY 254, 257, or 375
      Group II
      PSY 363, 464, or 470
   B. Psychology Electives (15 semester hours)
      These may be selected from among any of the departmental offerings.
4. Department Free Electives — 29-48 semester hours
   These electives are in addition to the nine semester hours of electives listed under the General Education Requirements and may be selected from among any of the University course offerings.

BACHELOR OF ARTS—PSYCHOLOGY: COGNITIVE REHABILITATION CONCENTRATION

1. General Education Requirements — 47-51 semester hours
   Includes PSY 100. MAT 103 or a higher MAT course is required. BIO 100 and CSC 101 are strongly recommended for partial completion of the science requirement.
2. Foreign Language/Culture Requirement — 0-15 semester hours
3. Departmental Requirements — 39 semester hours
   PSY 245, 246, 254, 257, 363, 375, 400, 441, 442, 464, 470, 475, and 480
4. Department of Special Education Requirements — 6 semester hours
   EDA 101 Psychology of the Mentally Handicapped
   EDA 102 Psychology of the Physically Handicapped
5. The following special education courses are not required; however, it is strongly recommended that the student consider them when selecting free electives.

EDA 220 Behavior Management
EDA 350 Life Curriculum and Methods
EDA 360 Diagnostic and Prescriptive Teaching
SPP 340 Development and Disorders of Language

6. Free Electives 17-36 semester hours
These electives are in addition to the nine semester hours of electives listed under the General Education Requirements (see pages 35–39 in the catalog) and may be selected from among any of the University course offerings.

BACHELOR OF SCIENCE IN EDUCATION—SOCIAL STUDIES: PSYCHOLOGY

Psychology Requirements 18 semester hours
PSY 245, 254, 257, 375, 400, and 464

See description under "Social Studies: B.S. in Education," page 116.

Minor in Psychology 18 semester hours

The minor in psychology is designed for students of any major and is tailored to the specific educational goals of each student. After taking PSY 100, the student will choose 15 additional hours of PSY courses in consultation with the Department of Psychology's minor adviser.

Minor in Cognitive Disabilities 18 semester hours

The minor in cognitive disabilities is designed for special education majors and others who work to facilitate the recovery of cognitive functions (such as memory, reasoning, judgment, etc.) of patients who have suffered brain trauma following an accident or stroke.

Required Courses
PSY 363, 464, 470, 475, 480 15 hours

Electives
PSY 375, PSY 325 or EDP 351 3 hours

COURSE DESCRIPTIONS

PSYCHOLOGY

Symbol: PSY

★ 100 **Introduction to Psychology** (3) Introduction to the scientific study of behavior. The multiple bases of human behavior with emphasis on the learning process. Basic concepts, principles, and methodology. Students may be required to become familiar with an ongoing research study in psychology as an out-of-class assignment. Offered fall and spring semesters.

210 **Developmental Psychology: Lifespan** (3) A survey of research findings and theoretical issues related to developmental processes from the prenatal phase to senescence. PREREQ: PSY 100. Majors are advised to take PSY 382 and/or PSY 384 rather than PSY 210.

245 **Research Methods and Statistics I** (3) Experiments on selected problems with emphasis on techniques in the design and execution of experiments, and on the application of elementary techniques to the collection, analysis, and interpretation of data. PREREQ: PSY 100. Offered fall and spring semesters.

246 **Research Methods and Statistics II** (3) Continuation of PSY 245 with emphasis on more advanced experimental designs and statistical techniques. RECOMMENDED PREREQ: PSY 245. Offered fall and spring semesters.

254 **Social Psychology** (3) The study of the ways in which the individual is affected by the actual, imagined, or implied presence of others. PREREQ: PSY 100. Offered fall and spring semesters.

256 **Study of Personality** (3) An introduction to the dynamics of personality functioning. Topics such as self-esteem, stress, conflict, frustration, and defense will be explored. PREREQ: PSY 100.

257 **Theories of Personality** (3) A course in personality that examines the theories and writings of Freud, Jung, Adler, Fromm, Erikson, Rogers, and other major personality theorists. PREREQ: PSY 100.

265 **Industrial/Organizational Psychology** (3) A basic course for business majors and others interested in the psychology of the workplace. Emphasis on the theoretical developments in psychology as these relate to the study of people in organizations and industry. Offered fall and spring semesters.

291 **Psychological Techniques** (3) A survey of a variety of psychological techniques that are applied in the process of observing, diagnosing, and changing problematic human behavior. PREREQ: PSY 100.

325 **Psychological Testing and Measurement** (3) Principles of psychological measurement including standardization, scale transformation, reliability, validity, and item analysis. Use of tests for the solution of problems in industrial, clinical, and educational settings. PREREQ: PSY 100.

327 **Behavior Modification** (3) A survey of the principles and practices employed in inducing behavioral changes in clinic, institution, agency, and school settings. PREREQ: PSY 100.

335 **Animal Behavior** (3) The evolution and adaptiveness of behavior. Emphasis on physiological, genetic, and learning processes underlying animal behavior. PREREQ: PSY 100, or BIO 100 or 110, or permission of instructor.

350 **Motivation** (3) A study of drives, motives, and emotions as determinants of behavior. Physiological and social aspects of motivation will be explored with some attention given to pathological factors. PREREQ: PSY 100.

362 **History and Systems of Psychology** (3) An integrated overview of the history of psychology as well as the systems, theories, and fundamental issues with which psychologists have concerned themselves in the past, recent, and current stages of the science. PREREQ: PSY 100; PHI 101 recommended.

363 **Psychology of Learning** (3) Basic laws and theories of learning. PREREQ: PSY 100.

365 **Psychology of Women** (3) A study of the behavior and experience of women. Biological, cultural, interpersonal, and intrapersonal determinants of women's actions, thoughts, and feelings will be explored. PREREQ: PSY 100. Offered fall and spring semesters.

375 **Abnormal Psychology** (3) The nature and manifestations of normality and abnormality, mental mechanisms and symptoms, psychoneuroses, psychoses, the psychopathic personality, and mental deficiency. PREREQ: PSY 100. Junior or senior standing recommended. Offered fall and spring semesters.

382 **Developmental Psychology of Infancy, Childhood and Adolescence** (3) Study of the normal child from conception to puberty. Emphasis on current theoretical issues involved in the effects of early experience and environment. PREREQ: PSY 100.

384 **Developmental Psychology of Adulthood and Aging** (3) Study of psychological development during the mature years up to and including death and dying. PREREQ: PSY 100.

390 **Principles of Counseling and Psychotherapy** (3) A review of theoretical assumptions underpinning various approaches to counseling and psychotherapy with particular reference to comparative outcome data. PREREQ: PSY 256, or PSY 257, or PSY 375.

400 **Senior Seminar in Psychology** (3) Advanced topics in psychology. A written and/or oral presentation describing and analyzing current issues in psychology. Required of all psychology majors. Offered fall and spring semesters.

◆ 410 **Research in Psychology** (1-3) Special research projects, reports, and readings in psychology. Open to seniors only. PREREQ: Permission of department chairperson. Offered fall and spring semesters.

413 **Psychodrama I** (3) This class is designed as an introductory course, integrating theory and practice of psychodrama as a psychotherapeutic modality. Emphasis is placed on understanding the basic psychodramatic and sociometric techniques from a theoretical perspective with emphasis placed on how to use these basic techniques in applied situations. PREREQ: Permission of instructor.

414 **Psychodrama II** (3) Continuation of PSY 413 at an advanced level. Integrating clinical sociometry, auxiliary ego techniques, the social atom concept, warm-up techniques, role training, and student directing. Instruction will be both didactic and experiential, integrating the theoretical and applied components of psychodrama and sociometry as a therapeutic modality. PREREQ: PSY 413.

430 **Human Sexual Behavior** (3) An intensive study of those variables under which human sexual behavior functions. Research from sociological and medical studies is integrated with psychological knowledge. PREREQ: PSY 100. Offered fall and spring semesters.

441 **Field Experience in Psychology I** (3) A work-study program in an educational or mental health facility under joint supervision of the instructor and the staff psychologist of the field institution. Offered fall and spring semesters. Permission of instructor required.

★ Approved distribution requirement course.
◆ This course may be taken again with the approval of the Department of Psychology chairperson.

442 Field Experience in Psychology II (3) Continuation of PSY 441.
443 Psychology of Group Processes (3) An exploration of the dynamics of interpersonal behavior in small groups. Theory applied to practice in class. PREREQ: PSY 100; permission of instructor recommended.
445 Organizational Development (3) The study of human behavior in task group and organizational contexts. PREREQ: PSY 100; PSY 254 or PSY 265 recommended.
447 Human Intimacy (3) A study of processes and factors in establishing, maintaining, and terminating relationships via the use of group methods.
464 Physiological Psychology (3) Anatomical, endocrinological, and physiological processes underlying behavior, including motivation, emotion, learning, and memory. Special attention is given to the biological bases and treatments of mental illness. PREREQ: PSY 100, or BIO 100 or 110 recommended. Offered fall and spring semesters.
470 Sensory and Perceptual Processes (3) A study of how we process sensory information and perceive our environments. PREREQ: PSY 100.
475 Cognitive Psychology (3) Basic research and application in memory and information processing. PREREQ: PSY 100; PSY 363 recommended.
480 Neuropsychological Rehabilitation (3) The theory and practice of cognitive rehabilitation in patients with brain injury and disease. Topics include findings from both basic and clinical research. Methods of cognitive rehabilitation are presented with an emphasis on operant procedures. PREREQ: Permission of instructor or chairperson.
◆ 490 Topical Seminar in Psychology (1-3) Special topics in psychology not offered under existing, regularly offered courses. PREREQ: Consent of instructor or chairperson recommended.

◆ This course may be taken again with the approval of the Department of Psychology chairperson.

Department of Theatre Arts

Harvey Rovine, *Chairperson*

ASSOCIATE PROFESSORS: Berkowitz, Bytnar, Hashimoto-Sinclair, Jacobson, Rovine

ASSISTANT PROFESSORS: Hall, McCoy

INSTRUCTOR: Saddoris

The Department of Theatre Arts offers a Bachelor of Arts program which combines the foundation of a liberal arts education with the creative skills needed by the developing theatre artist. In addition, the department cooperates with the Department of Communication Studies in its Bachelor of Science in Education which qualifies graduates to meet the state of Pennsylvania requirements for teacher certification in communication. Students who are majors in the program may choose a minor in theatre to meet the certification requirements.

Students with an academic major or minor in the department are required to meet with a departmental faculty adviser to develop their curricular plans, select courses prior to scheduling, discuss career options, and to be aware of cocurricular opportunities. Handbooks are provided to entering students for their use as a guide to the development of their academic programs.

Departmental Student Activities

University Theatre, United States Institute for Theatre Technology, and Alpha Psi Omega are student organizations which involve students, majors, and nonmajors in theatre-related activities. For more information see the "Student Affairs" section of the catalog.

Department Apprenticeships

Although not required, professional apprenticeship experiences are available to qualified theatre majors. Students and their placements are screened by the department to assure mutual satisfaction for all parties involved. For details, students should see the department chairperson.

REQUIREMENTS FOR THE BACHELOR OF ARTS IN THEATRE

1. General Education Requirements, see pages 35–39. — 51 semester hours
2. Core Requirements (all concentrations) (See department handbook for course requirements.) — 46 semester hours
3. Concentration Requirements — 16 semester hours
   a. General Theatre
   b. Acting
   c. Directing
   d. Musical Theatre
   e. Technical Production
   (See department handbook for course requirements.)
4. Foreign Language Options, see page 38. — 0-15 semester hours

Bachelor of Science in Education: Theatre Emphasis

(See catalog under Department of Communication Studies.)

Minor in Theatre Arts — 18 semester hours

THA 103, 104, 113, 210, 215 or 316, and 301

ASSOCIATE OF ARTS DEGREE

(See catalog under Requirements for Degree of Associate of Arts, pages 38–39.)

COURSE DESCRIPTIONS

THEATRE

Symbol: THA

◆ 100 Theatre Practice (1 credit for theatre majors) Laboratory experience in technical aspects of play production.
100 Theatre Practice (3 credits for nonmajors) Laboratory experience in technical aspects of play productions. Open to all students.
101 Introduction to Theatre (3) A survey of theatre as a humanity by exploring how theatre reflects its time and country. This course teaches the student what to listen for and what to look for when attending a live theatre performance. Will fulfill general education arts requirement.
102 (also COM 102) Oral Interpretation I (3) Theory and practice of oral presentation of various types of literature to an audience.
103 Acting I (3) The first part of a one-year course designed to introduce the basic skills and techniques needed hy the developing actor to create successfully a character for performance on stage. Will fulfill general education arts requirement.
104 Stagecraft (3) Planning, construction, painting, rigging, and shifting of scenery. Manage-ment of all operations backstage. Laboratory required.
113 Script Analysis (3) To promote the development of the student's analytical faculties in the research and preparation of the play script for a staged production. Will fulfill general education arts requirement.
202 Oral Interpretation II (3) Advanced work in oral presentation of literature with emphasis on the theory and technique of readers theatre. PREREQ: THA 102.
203 Acting II (3) Second part of a course designed to introduce the basic skills and techniques needed to create a role on the stage. Emphasis on character development.
207 Children's Theatre (3) Production of children's theatre for stage and television. Course elements will include script analysis and production values, publicity, and tour preparation. Students enrolled in the course will create a complete production.

◆ This course may be taken again for credit.

209 **Creative Drama** (3) Theory and practice in creative techniques of expression and dramatic forms to be used as a teaching and recreational device for children and adults.

210 **Stage Makeup I** (3) Theory and practice in design and application of various types of makeup for the stage. Laboratory required.

215 **Costume Construction** (3) Theory and practice in theatrical costuming including organization, construction, drafting, dyeing, painting, and wardrobe management. Laboratory required.

316 **Costume History and Design** (3) The history of European and American costume and its application to the period production. Process of designing costumes in various styles will be explored. Students are required to design costumes for periods studied. Laboratory required. THA 215 is not a prerequisite.

301 **Directing I** (3) An introduction of the theories and techniques of stage direction with emphasis on prerehearsal planning, play selection, script analysis and promptbooks, casting and blocking. PREREQ: THA 103, 104, and 113.

302 **Scene Construction and Rigging** (3) This course develops a familiarity with scenic construction techniques and materials. Practical solutions to technical problems are discussed. Other topics include theatre safety, technical drawing, and budgeting. This course is a requirement for technical majors but an elective for all other theatre majors. PREREQ: THA 104.

303 **Acting III** (3) A course for the advanced student actor who wishes in-depth work and study in character building and analysis. Extended scene work and audition materials also will be stressed. PREREQ: THA 203.

304 **Scene Design and Painting** (3) This course identifies and explores the processes involved in creating a scenic space that is both practical and expressive. Skills in set design, representational painting, scenic drafting, and script interpretation are developed.

305 **Stage Lighting** (3) Exploration of lighting as a means of artistic communication in the theatre. The course covers the aesthetics, tools, technology, and the graphic methods used to light a play. Special topics in lighting for other performing arts will be discussed.

306 **History of Theatre I** (3) The development of theatre from the ancient Greeks to the 17th century. Writing emphasis.

307 **History of Theatre II** (3) The development of theatre from the 17th to the 20th centuries. Writing emphasis. THA 306 is not a prerequisite.

308 **Graphics for the Stage** (3) An exploration of graphic solutions used in the various stages of planning and executing a setting for the theatre. Scenic design, stage technician drafting techniques, and perspective techniques used exclusively in the theatre.

309 **Trends in Contemporary Theatre** (3) The theatre artists, structures, and social milieu whose collective interaction can be referred to as contemporary theatre. The creative work being done in America, England, Poland, South Africa, and other nations will form the core of the course.

310 **Stage Makeup II** (3) Theory, development, and application of theatrical makeup according to the play, its period, the style of production, the actor, and the character. Students must have previous knowledge of the basic two- and three-dimensional makeup devices. PREREQ: THA 210.

◆ 399 **Directed Studies in Theatre** (1-6) Research, creative projects, reports, and readings in theatre. Students must apply to advisers one semester in advance of registration. PREREQ: THA 102, 103, 104, and 113 or permission of instructor.

◆ 400 **Professional Apprenticeship** (3-15) This course provides a structured and supervised work experience in theatre. Students must submit an application to the department chairperson for permission.

401 **Directing II** (3) Play direction as a creative aspect of stage production with emphasis on exploration of concept, techniques of rehearsing a play and working with actors, and the role and function of the stage manager. PREREQ: THA 301.

403 **Acting IV** (3) Study and scene work in a variety of period styles. Greek, Restoration, Elizabethan, and Commedia will be stressed. Students will focus on the physical, intellectual, and emotional demands inherent in premodern texts. PREREQ: THA 303.

404 **Advanced Scenic and Lighting Design** (3) Analysis of excellent scene designs of the past. Practice in maximizing the visual impact of stage scenery and lighting. Design projects for selected, visually challenging plays. Students design for both student-directed and major productions on campus. One hour of lab. PREREQ: THA 304.

405 **Advanced Costume and Makeup** (3) In-depth study of costuming and stage makeup for productions. Various styles and periods of productions will be studied. Students prepare a professional portfolio. PREREQ: THA 210 or 310, and THA 215 or 316. Laboratory required.

◆ 499 **Theatre Seminar** (3) Intensive examination of a selected area of study in theatre. Topics will be announced in advance.

◆ This course may be taken again for credit.

School of Business and Public Affairs

Christopher M. Fiorentino, *Dean*

Department of Accounting

Clyde J. Galbraith, *Chairperson*

PROFESSORS: Mott, A. Naggar

ASSISTANT PROFESSORS: Galbraith, Smith

The Department of Accounting offers a full program of accounting courses designed to prepare a student for entrance into the fields of public, private, or governmental accounting. Students successfully completing the curriculum should be adequately prepared to take the Certified Public Accountant (CPA) and Certified Management Accountant (CMA) examinations.

BACHELOR OF SCIENCE IN ACCOUNTING

1. General Requirements, see pages 35–39 includes ECO 111; see appropriate curriculum guidance sheet) — 51 semester hours
2. Business and Economics Core — 39 semester hours
   ACC 201, 202; BLA 201; ECO 112, 251, 252, 335; FIN 325; MGT 300, 341, 499; MKT 301, 327
3. Other courses required by the business program: CSC 101 and MAT 107. These courses satisfy, and are included under, general requirements.
4. Other course required: MAT 108 — 3 semester hours
5. Accounting Major: ACC 301, 302, 303, 304, 305, 401, 403, 405 — 24 semester hours
6. Economics or Business Electives — 3 semester hours
7. Free Electives — 9 semester hours
   NOTE: A minimum grade of C must be achieved in *all* accounting courses, and in BLA 201, ECO 111, ECO 112, MGT 300, and MKT 301.

Accounting Minor — **18 semester hours**

1. Required — 12 semester hours
   ACC 201, 202, and 301; ECO 111
2. Electives — 6 semester hours
   Any two of the following courses: ACC 302, 303, 304, 305, 403, 404, and 407

COURSE DESCRIPTIONS
ACCOUNTING

Symbol: ACC

The objective of the accounting concentration is to prepare students for accounting careers in business, for the CPA examination, and for the private practice of accounting.

201 Principles of Accounting I (3) Introduction to financial accounting. A conceptual approach to recording, financial summarizing, and presentation and evaluation of the financial affairs of a business firm.

202 Principles of Accounting II (3) Introduction to management accounting. Accumulating, processing, and interpreting financial data to be used as a basis for making managerial decisions in a business firm. PREREQ: ACC 201.

301 Intermediate Accounting I (3) Analysis and evaluation of assets, liability, and capital account. Problems of income measurement and recognition. PREREQ: ACC 202.

302 Intermediate Accounting II (3) Continuation of ACC 301. PREREQ: ACC 301.

303 Cost Accounting I (3) Techniques of product unit cost determination and uses of cost data in managerial decisions. PREREQ: ACC 202.

304 Cost Accounting II (3) Continuation of ACC 303. PREREQ: ACC 303.

305 Intermediate Accounting III (3) Continuation of ACC 302. PREREQ: ACC 302.

400 Accounting Internship (3-6) The business internship for students in accounting enhances the student's educational experience by providing a substantive work experience in the business world. PREREQ: Internship program coordinator's approval.

401 Auditing (3) Introduction to auditing as a tool for verification of the fair representation of financial statements. PREREQ: ACC 302.

403 Federal Taxation I (3) A study of individual and federal income taxes, with some business application. Emphasis on tax planning for minimization of tax liability. PREREQ: ACC 202.

404 Federal Taxation II (3) A study of the principles of federal income taxation on corporations and corporate distributions, partnerships, estates, and trusts. Emphasis is on tax planning and researching complex problems. PREREQ: ACC 403.

405 Advanced Accounting (3) In-depth study of business combinations and consolidations, government accounting, and other specialized topics. PREREQ: ACC 302.

407 Not-for-Profit and Governmental Accounting (3) A study of accounting principles and procedures of not-for-profit and governmental organizations. The course includes accounting for the local, state, and federal government, hospitals, colleges and universities, public schools, and charities. PREREQ: ACC 202.

410 Directed Studies in Accounting (1-3) Special research projects, reports, and readings in accounting. Open to seniors only. PREREQ: Permission of instructor.

415 Professional Accounting (3) This course is intended to develop and implement students' knowledge currently required for professional accounting careers. PREREQ: Senior standing and instructor's approval.

420 Accounting Information Systems (3) Accounting information systems development, processing, and controls with emphasis on current computer-based systems and programs used in accounting fields. PREREQ: ACC 302 and ACC 303.

Department of Criminal Justice

Saul H. Greenberg, *Chairperson*

PROFESSOR: Nestlerode

ASSOCIATE PROFESSORS: Greenberg, Metz

ASSISTANT PROFESSORS: Brewster, Nealy

West Chester's criminal justice curriculum is a broad-based, interdisciplinary program combining theoretical concepts with practical aspects. It has been designed to fulfill the needs of four categories of students:

1. Those who wish to undertake a four-year program of study to prepare for careers in criminal justice
2. Graduates of two-year colleges who desire to continue their educations and obtain bachelor's degrees
3. In-service personnel who would like to increase their professional competence by strengthening their educational background
4. Those who wish to pursue a master's or law degree

The program provides the competencies, understanding, and philosophy necessary for professional performance in the various fields of criminal justice. It is not designed to develop specialists in any one specific area; however, students may: 1) develop areas of special interest through the selection of electives, or 2) choose a minor program from complementary disciplines. The successful student should master and retain career skills immediately useful in the criminal justice system, as well as possess the overall intellectual grasp of the situation where those skills would be appropriate.

An important feature of the program is the one-semester practicum served at a criminal justice agency. Designed to give personal, direct experience, it affords the student the chance to put his or her theoretical knowledge to work.

BACHELOR OF SCIENCE—CRIMINAL JUSTICE

1. General Requirements, see pages 35–39	51 semester hours
2. Required Courses CRJ 110, 210, 300, and 400 NOTE: A minimum grade of C– is required in each course.	12 semester hours
3. Criminal Justice Electives	21 semester hours
4. Practicum CRJ 490 NOTE: A minimum grade of C– is required in this course.	12 semester hours
5. Related Areas (minor or electives taken under advisement)	32 semester hours

Enrollment in CRJ 110 and 210 is open to all students. However, enrollment in other criminal justice courses may be limited to criminal justice majors and to other students approved by the department.

Minor in Criminal Justice	18 semester hours
1. Required Courses CRJ 110, 210, 300, and 400	12 semester hours
2. Criminal Justice Electives	6 semester hours

This minor may be taken as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

COURSE DESCRIPTIONS
CRIMINAL JUSTICE

Symbol: CRJ

110 Introduction to the Criminal Justice System (3) A course designed to describe the criminal justice system from arrest through trial, appeal, sentencing, correction, and parole. The object of this course is to provide the student with a procedural framework of the criminal justice process.

210 Theories in Criminal Justice (3) This course is a survey of the historical and contemporary attempts to explain the phenomena of crime and criminal behavior from the perspectives of sociology, psychology, economics, biology, and law. Emphasis will be placed on contemporary theory and the analysis of evidence supportive of various theoretical positions.

214 Organized Crime (3) Organized crime is examined as an American phenomenon, then compared to organized criminal activity in Europe and Asia. The student will place in perspective the current organizations in the U.S. and their historical development here over the last century. European groupings are examined as precursors/models of U.S. transplants with insights into the proliferation of such groups in the Far East.

220 Corrections (3) The purpose of this course is to provide the student with a survey and analysis of the correctional system and its processes from both a historical and geographical perspective. Emphasis will be placed on relating this survey and analysis to contemporary practice and future trends in the area of corrections.

230 Probation and Parole (3) The intent of this course is to provide the student with an introduction to, and survey of, probation and parole practices from a historical perspective. Assumptions and theories about human behavior, upon which such practices are based, and contemporary and future trends in the field also will be examined.

250 Scientific Crime Detection (3) This course will engender an appreciation of what is entailed for an individual to understand current scientific methods of detection in the criminal justice system.

255 Criminalistics (3) To familiarize the student with the recognition, collection, and processing of physical evidence at the criminalistics laboratory. Course enrollment is limited.

300 Criminal Law (3) This course will cover the principles of criminal responsibility, the purposes and limitations of criminal law, and the elements of various criminal offenses. Substantive criminal law will cover the conduct, acts, and omissions that have been designated as crimes. These acts (or omissions) plus the mental state and other essential elements that make up criminal action will be examined.

304 History and Philosophy of Law and Justice (3) This course is intended to aid the beginning student in understanding the historical and philosophical influences on the American criminal justice system; introduce the student to a broad range of individuals who, over a period of 2,000 years, have made significant contributions to the formulation and process of justice; and analyze various other systems of criminal justice found in dissimilar cultures.

310 Juvenile Justice Administration (3) A survey of both the formal (police/courts/corrections) and the informal (diversion) means of dealing with the problem of juvenile crime. Emphasis is not on the behavior but on society's response to it. Emphasis also will be placed on the legal rights of juveniles.

312 White-Collar Crime (3) This course analyzes the usually nonviolent criminal conduct described as official corruption, systematic crime, or violations of trust that are characterized by calculation, deceit, and personal enrichment. The influence of organized crime also is explored.

330 Criminal Behavior (3) This course exposes students to broad, theoretical positions on crime and to observable criminal offenses. Students will learn to avoid oversimplified, dogmatic answers. Research findings on understanding and controlling crime will be discussed. The course will help a student appreciate the need to integrate contemporary psychology into an understanding of criminal behavior.

340 Victimless Crimes (3) This course is designed to familiarize the student with the ramifications of vice control. It will cover such topics as prostitution, homosexuality, pornography, gambling, and bookmaking, as well as historical perspectives, statutes and interpretations, a comparison of illegal operations, enforcement techniques, and legalization efforts.

368 Private Security (3) This course will provide an in-depth examination of the various facets and interests of the private sector of security. A review of the history, organization, management, and safety issues pertaining to the private security

profession will be addressed. Emphasis is placed on policy and decision making, personnel, and budgeting, as well as an examination of security programming that responds to the private sector.

400 **Criminal Procedure** (3) This course is an examination of the theory and application of the law and rules of evidence for the criminal justice student. It will develop an understanding of the reasons for the rules of evidence and a grasp of the application of the rules in case investigation and for presentation in court through a study of selected cases, statutes, and the analysis of hypothetical cases and situations.

◆ 410 **Independent Studies in Criminal Justice** (1-3) Research projects, reports, and readings in criminal justice. PREREQ: Permission of department chairperson.

420 **Criminal Investigations** (3) Criminal investigation functions of police involving crimes of violence, crimes against property, and organized crime. Police operational techniques and applicable court decisions in the areas of interview, search, seizure, and arrest.

430 **Interviewing and Counseling the Offender** (3) Techniques of interviewing and counseling applicable to law enforcement and corrections officers. Areas of study include the initial interview, interrogation, informant-handling techniques, manipulative behavior of offenders, and exit interviews. Role playing and sociodrama are used.

432 **Correctional Law** (3) A course designed to provide those involved in the correctional process with a basic introduction to the emerging field of law in this area. It encourages understanding of rights and responsibilities of the incarcerated offender and of the administrative staff.

435 **Assessment of the Offender** (3) This course will develop students' abilities to describe, recognize, and understand psychometric measures on adult and juvenile offenders. Topics include understanding the selection of psychometric measurements, observing and drawing from life histories, and understanding how violent behavior may be predicted.

440 **Violent Crime** (3) This course seeks to survey the incidence of violent crime, to analyze the violent criminal, and to study the variety of means that have been developed to control criminal violence.

455 **Topical Seminar in Criminal Justice** (3) Intensive examination of a selected area of study in the field of criminal justice. Topics will be announced at the time of offering. Course may be taken more than once when different topics are presented. PREREQ: Junior or senior CRJ major or with permission of instructor.

460 **Evidence and Trial Advocacy** (3) This course moves a step beyond basic criminal law and criminal procedure studies and takes the student into the courtroom. The student will learn basic rules of evidence presentation and court procedure and discover how the trial process works by actively participating in it. The student will learn how to distill the issues, and to present concise, well-reasoned arguments supporting a given position. It is in this manner that the student will learn critical analysis and practical presentation. (This course is designed for those students who have completed CRJ 300 and CRJ 400.)

461 **Notable Criminal Cases** (3) Selected factual accounts of criminality and criminal behavior over the past 75 years are analyzed. Selection is based on notoriety and continued dispute. Course is designed to illuminate, through reading and class analysis, a wide spectrum of criminal conduct and the related investigative and judicial response.

462 **Management Problems and Practices** (3) This course is intended to aid in the instruction of students who are potential candidates for administrative positions. Its objective is neither to present a new approach to the field nor to support an existing one; rather, it is to provide the student with a well-rounded view of the subject and to lay the groundwork for further study. This is done by bringing together the most appropriate concepts and practices in managing an organization; e.g., purpose defining, planning, decision making, staffing, motivating, communicating, collective bargaining, and controlling.

470 **Interpersonal Relations** (3) This course is designed to aid a student's self analysis in terms of behavior patterns or changes affecting his or her life. This self knowledge often leads to understanding relationships with others, which can assist students in relating to other persons in their personal, social, and professional lives.

482 **Contemporary Legal Issues** (3) This course encompasses a brief review of the general principles of law and procedure, followed by an in-depth study of the more controversial legal dilemmas facing today's criminal justice system. The course is designed to shed light on each side of the issue, to enable the student to see beyond the superficial aspects of the conflict, and to understand its more profound nature.

487 **Ethical Issues in Criminal Justice** (3) This course is designed to identify and examine ethical issues among practitioners and students in the criminal justice field. Such issues may include the discretionary power of arrest, the use of deadly force, the decision to prosecute, participation in plea bargaining, representation of the guilty, and the imposition of punishment. Such a course will promote inquiry that combines ethical analysis with a practical awareness of the realities of the criminal justice system.

490 **Practicum** (12) Independent study based on a vocational placement in a criminal justice agency: police, courts, defense, or corrections. The design of each placement depends on the student's previous experience and area of interest. Written, biweekly reports, and a major paper are required. For seniors only.

496 **Criminal Justice Planning** (3) This course is intended to aid in the instruction of undergraduate students who are potential candidates for planning, evaluation, or administrative positions. Given the recent development of the field of criminal justice planning, this course represents a beginning effort at a comprehensive discussion and review of justice system planning and evaluation.

◆ This course may be taken again for credit.

Department of Economics

Roger Bove, *Chairperson*

PROFESSORS: DeMoss, Sylvester, T. Naggar

ASSOCIATE PROFESSORS: Benzing, Bove, Fiorentino, Mohan

ASSISTANT PROFESSORS: Dunleavy, Tolin

The primary objective of the Department of Economics is to provide a learning experience that will permit each student to achieve maximum intellectual development in his or her chosen area of study and to prepare for a satisfying career in that field.

As an aid to the achievement of this purpose, the Department of Economics strives:

(1) To assist students in acquiring a fundamental knowledge and understanding of the framework within which our business and industrial system operates

(2) To acquaint students with the modern techniques used by business and industry that enables them to deal effectively with the changing environment

(3) To encourage students in developing the ability to analyze situations, to relate and classify pertinent factors, and to derive alternatives for solving problems

The Department of Economics coordinates its courses with the departments of Accounting, Management, and Marketing.

Majors in the department must consult the departmental handbook and their adviser annually for current requirements.

Two degree programs are offered:

1. The B.S. in ECONOMICS focuses on a business orientation of economic analysis
2. The B.A. in ECONOMICS provides a societal orientation to economic analysis

BACHELOR OF SCIENCE—ECONOMICS

1. General Requirements, see pages 35–39 (Includes CSC 101, ECO 112*, and MAT 107. See appropriate curriculum guidance sheet.)	51 semester hours
2. Business and Economics Core	39 semester hours

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* A minimum grade of C– must be attained in each of these courses.

ACC 201*, 202*; BLA 201*; ECO 112*, 251, 252, and 335, FIN 325, MGT 300*, 341, and 499; and MKT 301* and 327

3. Other courses required by the business program: CSC 101 and MAT 107. These courses satisfy and are included under general requirements.
4. Other course required—MAT 108 — 3 semester hours
5. Economics Major*—ECO 340 and 348 and three additional 300-level or above courses in economics or finance — 15 semester hours
6. Economics or Business Electives — 9 semester hours
7. Free Electives — 21 semester hours
   Includes nine semester hours for general requirements

*A minimum grade of C– must be attained in these courses.

BACHELOR OF ARTS—ECONOMICS

1. General Requirements, see pages 35–39 — 51 semester hours
2. Foreign Language Requirement — 0-15 semester hours
3. Social Science Electives — 9 semester hours
4. Economics Major Requirement — 36 semester hours
   ECO 111-112, 251-252, 335, 340, and 348; MAT 107-108; and additional departmental courses
5. Electives — 5-20 semester hours
   Six semester hours of electives may be economics courses. See department adviser.

Minor in Economics — **18 semester hours**

Course requirements are ECO 111*, 112*, 340*, and 348*, plus two economics electives selected under departmental advisement. (MAT 107 and 108 are prerequisites for ECO 340 and 348.)

COURSE DESCRIPTIONS
ECONOMICS

Symbol: ECO

★ **101 Principles of Economics—Survey (3)** Basic principles underlying production and consumption activities in our modified, capitalistic economic system, from the aggregate as well as individual and sectoral standpoints. Issues include competition, unemployment, inflation, economic growth, and alternative systems.

†**111 Principles of Economics I (Macro) (3)** National income and its measurement. The determination of price levels, output, and employment. Money and credit, expenditures, and economic stability. Government fiscal and monetary policy. PREREQ: Working knowledge of high school mathematics is required.

†**112 Principles of Economics II (Micro) (3)** Principles underlying use and allocation of scarce productive resources. Consumption and production activities. Value, price, and income distribution. Considerations of economic efficiency and welfare. PREREQ: Working knowledge of high school mathematics and ECO 101 or 111.

251 Quantitative Business Analysis I (3) Considers the fundamental ideas of statistical theory that are appropriate for solving problems in the fields of business and economics. Topics include descriptive statistics, probability theory, sampling and estimation, and hypothesis testing. PREREQ: MAT 107.

252 Quantitative Business Analysis II (3) Continuation of ECO 251. Topics include hypothesis testing, analysis of variance, and simple multiple regression analysis. PREREQ: ECO 251 and MAT 108.

303 Economic Role of Women (3) Statistical information pertaining to one of the most important changes in the American economy in this century—the increase in the number of working women. Job-related aspects, such as the historical pattern, labor force participation, education, earnings, labor supply, and sex discrimination. PREREQ: Junior-level standing or permission of instructor.

333 Consumer Economics (3) Major kinds of economic decisions required of consumers. Evaluation of the social and economic consequences of those decisions.

334 Labor Economics (3) Application of economic theory to the operation of labor markets and the collective bargaining process. Consideration is given to the development of the labor movement and public policy toward labor and employment. PREREQ: ECO 112.

335 Money and Banking (3) A survey of money, credit, and prices, emphasizing their effects on economic stability. The Federal Reserve System and its effect on credit control. PREREQ: ECO 112.

336 Regulation of Competition (3) Background and development of public policies that directly modify the free enterprise economy of the United States. Evaluation of policies that change the nature and extent of competition. PREREQ: ECO 112.

337 Economic Growth and Development (3) A survey and critical evaluation of alternative theories of capitalist economic development. Analysis and comparison of alternative public policies applicable to underdeveloped countries and regions. PREREQ: ECO 112.

338 International Economics (3) A descriptive, analytical examination of international trade, finance, and other economic relationships. The effects of public policies on these relationships. PREREQ: ECO 112.

340 Intermediate Microeconomics (3) A continuation and extension of the price-system analysis in ECO 112. Emphasis on the need for efficiency in the economy's use of scarce productive resources. PREREQ: ECO 112 and MAT 108.

341 Public Finance (3) Government's influence on stability of national income. Nature of taxes and expenditures at the various levels of government and their effect on the allocation of resources and the distribution of income. PREREQ: ECO 112.

343 Comparative Economic Systems (3) Basic ideas and economic institutions of socialism, communism, and capitalism in the 20th century. Problems created by the emergence of competing systems. PREREQ: ECO 112.

#344 American Economic Experience (3) This course examines the U.S. economy from the Civil War to the present with emphasis on economic theory and analysis. The sociological ramifications of economic conditions will be examined through the literature of the era.

345 History of Economic Thought (3) Origins of economic thought and comparison of the major schools of economic doctrine. Current economic and socio-political factors. PREREQ: ECO 112.

347 Managerial Economics (3) A course that seeks to develop managerial judgment. The premise is that technical application, to be successful, must proceed from economic feasibility. One plan is weighed against another in terms of comparative costs and revenues, return on investment, plant-replacement problems, obsolescence, and depreciation. PREREQ: ACC 202, ECO 112 and 252, and MAT 108.

348 Intermediate Macroeconomics (3) Introduction to the theory of income, employment, and growth. Provides the analytic tools necessary for dealing with aggregate economic problems. PREREQ: ECO 112 and MAT 108.

350 Urban Economics (3) Economic aspects of such urban problems as poverty, housing, taxation, income distribution, and discrimination. Analysis of economic aspects of various proposed remedies, including urban renewal, family allowances, cooperatives, and others. PREREQ. ECO 112.

385 Environmental and Resource Economics (3) The role of the environment in an economic system. Topics include energy economics, the economics of renewable and nonrenewable resources, and the economics of pollution. PREREQ: ECO 112 and MAT 108.

401 Introduction to Econometrics (3) Statistical and mathematical techniques applied to economic situations. Use of empirical data in economic analysis. PREREQ: ECO 112 and 252, and MAT 108.

410 Independent Studies in Economics (1-3) Special research projects, reports, and readings in economics. Open to seniors only. PREREQ: Permission of instructor.

◆ **411-412 Internship (3 or 6)** The internship is open to majors in economics only. It is intended to enhance the student's educational experience by providing substantive, professional work experience. PREREQ: Permission of the Department of Economics chairperson.

★ Approved interdisciplinary requirement course.
† ECO 111-112: Approved two-semester substitute for distributive requirement.
# Approved interdisciplinary course.
◆ This course may be taken again for credit.

FINANCE

Symbol: FIN

200 **Personal Finance** (3) This course addresses all of the major personal financial planning problems that individuals and families encounter. It presents a model of the major elements of effective money management. All of the latest financial planning tools and techniques are discussed.

315 **Financial Markets and Institutions** (3) Covers a variety of domestic and international financial markets and institutions. Analysis is provided for the structure, operation, and mechanics of these markets and institutions, along with the financial instruments traded therein. PREREQ: ECO 112 and 335.

325 **Corporation Finance** (3) The organization and financing of the modern corporation. Promotion, capitalization, short-term financing, capital budgeting, distribution of earnings, expansion, consolidation, failure, and reorganization. PREREQ: ACC 201, ECO 112 and 251.

326 **Intermediate Financial Management** (3) A second course in managerial finance. Emphasis is distributed between theory and practice. Once understood, good theory is common sense, and solving problems reinforces the practical applications. PREREQ: CSC 101, and FIN 325.

330 **Principles of Insurance** (3) The nature and types of risk management and insurance coverage are considered. Conceptual analysis and the impact of financial deregulation on personal and business risk management and insurance are covered. PREREQ: ECO 112 or permission of instructor.

332 **Real Estate Finance** (3) This course provides a basic orientation to the financial instruments and institutional structures and policies of real estate finance. PREREQ: ECO 112 or permission of instructor.

344 **Investments** (3) Problems and procedures of investment management; types of investment risks; security analysis; investment problems of the individual as well as the corporation. PREREQ: ACC 202, and ECO 112 and 251.

350 **Investment Analysis and Portfolio Management** (3) A second look at investment opportunities. This course assumes a basic understanding of the existence and function of financial assets. Each category of assets is studied from a theoretical perspective. Theories are then applied to the study of trading strategies. Problem solving is emphasized. PREREQ: FIN 344.

370 **Problems in Financial Management** (3) Case problems in corporate financial management. Includes cases on managing current assets, obtaining short-term loans, raising long-term capital, budgeting capital, and handling divided policy. PREREQ: FIN 325.

Symbol: INB

401 **International Finance** (3) Development of financial managerial knowledge and skills to understand the working of the corporate financial function in a global setting. PREREQ: FIN 325.

Department of Geography and Planning

Arlene C. Rengert, *Chairperson*

PROFESSORS: Rengert, Tachovsky, Thomas

ASSOCIATE PROFESSORS: Bielski, Grassel

ASSISTANT PROFESSORS: Fasic, Lewandowski, Welch

Geography and Planning is an academic discipline that bridges the physical and social sciences. Students study the patterns and processes of human and physical phenomena in relationship to each other. Students gain knowledge that can be applied to solving societal problems and to planning for the future, whether they are taking general education or elective courses, acquiring specialized preparation needed for working in geography and planning and related fields, or meeting particular needs in combination with other majors in arts and sciences or professional fields.

The field of geography assists students in comprehending the broad scope of the physical, cultural, and economic environments on local, national, and global scales. Geography courses develop skills and organize knowledge from various disciplines, and enable students to examine the integrated whole of a people with reference to habitat and interspatial relationships. Specialized skills, such as geographic information systems technology and computer cartography provide saleable skills for students interested in technical careers, and complement courses that teach knowledge of environmental and human situations and problems.

BACHELOR OF ARTS — GEOGRAPHY

The Bachelor of Arts in geography offers a choice of three emphases (called "tracks"): traditional geography (cultural, environmental, and economic geography including an international perspective), geographic analysis, and urban/regional planning. The geographic analysis and urban/ regional planning areas emphasize specialized skill development; internships are available and are recommended for qualified students.

Geography majors, as part of their general education requirements, must take GEO 101 or 103 and achieve a grade of 2.0 or better. They also must pass ENG 120 and 121 with a grade of 2.0 or better.

1. General Requirements, see pages 35–39 — 51 semester hours
2. Foreign Language/Culture Requirement — 0-15 semester hours
3. Additional Social Science Courses — 9 semester hours
4. Geography Core Requirements — 33 semester hours
   Required: GEO 102, 225, 310, 326, 400, and 404 (18 credits)
   Track requirements taken under advisement
   For geography "track:" five courses from specified groups, selected under advisement (15 credits) *OR*
   For urban/regional planning track: GEO 214, 320, and 322, and an additional two courses from a specified list, selected under advisement (15 credits) *OR*
   For geographic analysis track: GEO 324, 328, and 330, plus two courses from specified lists of courses, selected under advisement (15 credits)
5. Cognate Courses — 15 semester hours
   Courses (taken under advisement) that are specifically related to identified career aspirations, and chosen outside General Requirements, or Geography Core
   Required of all majors: COM 101, 216, or 315 and ENG 368, 371, or 420
   Required for urban/regional planning track: Two of these three: PAD 361, 364, 374, *plus* one CSC course (101 level or above)
   Required of geographic analysis track: CSC 115, 141, or 142, and one course from the following: ECO 251; MAT 121, 421, 422; and PHI 150, 422
6. Free Electives — 4-19 semester hours

BACHELOR OF SCIENCE IN EDUCATION— GEOGRAPHY CONCENTRATION

This is a professional degree program designed to prepare certified secondary school teachers of social studies. The curriculum involves an overall social studies exposure with a concentration in geography. See the program description under "Social Studies: B.S. in Education," page 116. All students in the geography con-

centration must complete seven courses from a specified list of physical and human geography courses.

Minor in Geography **18 semester hours**

The geography minor provides a flexible geography focus that combines well with other majors.

1. Required Course: GEO 101 or 102 or 103 — 3 credits
2. Elective Courses, taken under advisement from the department — 15 credits

Any two of the following: GEO 200, 204, 212, 220, 225, 310, and three other GEO courses, no more than one of which may be a 100-level course. This flexibility allows the student interested in environmental courses to build a sequence of those, the student interested in international courses to build knowledge of regions of the world, the student interested in urban issues to concentrate on courses in urban geography, and the student interested in geographic techniques of analysis to study computer cartography, geographic information systems, etc.

Minor in Planning **18 semester hours**

The minor program in planning allows students from other majors to acquire geography and planning skills and to expand their career possibilities to include such areas as land planning and management, conservation of resources, location of commerce and industry, and county or other local government.

1. Required Course: GEO 214 — 3 credits
2. Elective Courses, taken under advisement from the department GEO 212 or 320, 216, 225 or 401, 310, 322, 324 or 326 or 330, 328, 402, 403, and 415 — 15 credits

COURSE DESCRIPTIONS
GEOGRAPHY

Symbol: GEO

★ 101 **World Geography** (3) The scope of geography and its special place in the cultural spectrum. Human society is examined in a frame of spatial, environmental, and resource factors. Emphasis is placed on developing skills in the use of the "tools" of geography.

102 **Physical Geography** (3) The study of basic principles of physical geography and of relationships between components of the total earth environment.

★ 103 **Human Geography** (3) An inquiry into the theoretical and applied approaches to the study of human spatial behavior and the distribution of social problems.

200 **Patterns of World Cultures** (3) An examination of selected, non-Western areas, representing different stages of development, in the contemporaneous world. Emphasis is placed on cultural adaptation, innovation, and achievement of human occupants of these areas. PREREQ: ANT 102.

#204 **Introduction to Urban Studies** (3) An examination of the breadth of urban studies from the perspectives of many social science disciplines. Philadelphia is emphasized as an object of perception, as a place of life and livelihood, and as an example of continual change in the urban environment. PREREQ: ENG 121. Usually offered spring semester and summer.

205 **Geographic Influences in American History** (3) Geographic characteristics that figure prominently in the discovery and colonization of America, and on the progressive development of the United States up to the 20th century.

214 **Introduction to Planning** (3) The methods of analyzing problems of urban and regional planning. Emphasis is placed on systems of housing, recreation, transportation, industry, and commerce.

216 **Planning for Public Service** (3) A study of the quality of individual life. Analysis of geographic variation in social well being, problems of social systems monitoring, and social indicators used in planning.

220 **Economic Geography** (3) This course is concerned with the spatial patterns of economic activities, including production, consumption, and settlement. It provides an understanding of their location and the processes of change. The course is international in scope, with an emphasis on the global economy.

225 **Map and Aerial Photo Interpretation** (3) A laboratory course designed to develop skills in and promote an understanding of maps and aerial photos. Offered in fall semester.

230 **Conservation of Natural Resources** (3) An inquiry into the type, size, and distribution of natural resources, and into the problems of resource management. Emphasis is placed on the United States.

232 **Environmental Crises** (3) The nature and dimensions of environmental problems with an emphasis on endangered life-support systems. Aspects of natural and social environment systems and their mutual interrelationships.

236 **Climatology** (3) Climatic variations on the earth and their classification into regional types. Relationships of plants, soils, and cultures to types of climate. PREREQ: GEO 102 or permission of instructor.

252 **Macro Political Geography** (3) A study of selected major themes in political geography at the regional and international levels.

301 **United States and Canada** (3) An examination of the complexity and diversity of the physical and human landscapes of the U.S. and Canada. Both rural and urban geography are studied with an emphasis on recent geographic changes of influence—such as the shift from an emphasis on production to one on service and consumption, the growing importance of cities, and increasing racial and ethnic diversity.

■ 302 **Latin America** (3) Central and South America are studied with emphasis on understanding the major sources of change in recent times. The course focuses on up to four countries in addition to presentation of the region as a whole. Usually offered spring semester and summer.

■ 303 **Europe** (3) A regional study of Europe, excluding the former U.S.S.R. Includes a macro-study of the continent and sequential microstudies of culturalized landscapes. Usually offered spring semester and summer. PREREQ: GEO 101 or permission of instructor.

■ 304 **The Former Soviet Union** (3) A regional study of European and Asiatic U.S.S.R. with analysis of geographic factors that contribute to its strengths and weaknesses as a major world power. PREREQ: GEO 101 or permission of instructor.

310 **Population Problems** (3) The dynamic processes of population change (fertility, mortality, and migration) and the resultant changes in population distribution and composition. In addition to a substantive study of these topics, students are introduced to the use of primary data sources for demographic description and policy recommendation. Usually offered spring semester.

312 **Urban Geography** (3) Analysis of patterns, processes, and consequences of urban growth and development. Theory of systems, size, spacing, and functions of cities. Students will conduct outside analysis using real data.

320 **Land Use Planning** (3) An inquiry into the development of comprehensive land use studies by governmental and private agencies, emphasizing the development of skills in problem identification and resolution. PREREQ: GEO 214 or permission of instructor.

322 **Land Development Controls** (3) An insight into the "why" and "how" of land development, emphasizing the role of local government in zoning, subdivision regulation, and other land regulations. PREREQ: GEO 214 or permission of instructor.

324 **Introduction to Geographic Information Systems** (3) Data sources and analysis techniques used in the planning process, with emphasis on appropriate applications. Students receive considerable experience in using geographic information systems technology to solve real-world problems. PREREQ: GEO 214 or permission of instructor.

326 **Geographical Analysis** (3) Applications of basic statistical techniques to problems of spatial significance, emphasizing the adaptation of technique to problem, and the understanding and interpretation of specific analytical methods as applied to real-world situations. PREREQ: MAT 103 or higher-level mathematics course must be passed with a 2.0 or better prior to enrollment in GEO 326.

328 **Computer Graphics** (3) Structured to develop skills in the design and use of analytical and computer-mapping systems, the course emphasizes the techniques of spatial problem resolution and display. PREREQ: GEO 225 or permission of instructor.

■ 330 **Population Analysis** (3) A course designed to develop skills in demographic research, emphasizing interrelationships of population processes, use and limitation of data sources, and the understanding and interpreta-tion of specific demographic and related analytical methods. PREREQ: GEO 310 or permission of instructor.

★ Approved distributive requirement course.
Approved interdisciplinary course.
■ Culture Cluster

338 Computer Applications in Social Research (3) The use of existing and student-generated programming software in the design and execution of social research.
400 Senior Seminar in Geography (3) The study of historical and contemporary trends in geography; the design, preparation, and defense of a research proposal. Offered in fall semester.
401 Cartography (4) A laboratory course to develop proficiency in the design, construction, and appropriate application of maps and map-related graphics. Offered in spring semester. PREREQ: GEO 225 or permission of instructor.
◆ 402 Topical Seminar in Geography (3) Intensive examination of a selected area of study in the field of geography. Topics will be announced at the time of offering. Course may be taken more than once when different topics are presented. PREREQ: Junior or senior geography major or consent of instructor.
403 Planning Design (3) Selected experiences designed to assist the student (either as an individual or as a member of a group) in developing proficiency in information-providing techniques.
404 Senior Project in Geography (3) The execution of the research proposal (designed in GEO 400) as an acceptable departmental senior research paper. Offered in spring semester. PREREQ: GEO 400.
◆ 410 Independent Studies in Geography (3) Research projects, reports, and readings in geography. PREREQ: Permission of department chairperson.
◆ 415 Internship in Geography and Planning (3-15) Practical job experience in applying geographic theory, executing substantive research, and engaging in community service in selected off-campus situations. Open only to upper-division B.A. majors and minors in geography/ planning with permission of department chairperson.
424 Geographic Information Systems Applications (3) A course to advance the student's knowledge of the design and implementation of geographic information systems. PREREQ: GEO 324 or permission of instructor.

◆ This course may be taken again for credit.

Department of Management

Hung M. Chu, *Chairperson*

PROFESSOR: Chu

ASSOCIATE PROFESSORS: Selvanathan, McGee, Snow

ASSISTANT PROFESSORS: Hamilton, Leach, Murphy

The primary objective of the Department of Management is to provide students with the skills required to manage business and public organizations effectively.

To accomplish this objective, the faculty of the Department of Management will strive:

(1) to inculcate in the student the ability to reason analytically and critically
(2) to make the student sensitive to the human relations aspect of managing others
(3) to increase the student's awareness of the concepts and terms used in current managerial practice
(4) to increase the student's awareness of the international dimension of business
(5) to increase the student's skills in written and verbal communication
(6) to foster the student's ability to synthesize the knowledge acquired from various disciplines in order to focus on managerial problems

The Department of Management offers a B.S. in business management, which focuses on functions required to make a group of people work effectively together as a unit. These functions include planning, organizing, staffing, directing, and controlling.

DEGREE REQUIREMENTS

1. General Requirements, see pages 35–39 (Includes ECO 111*. See appropriate curriculum guidance sheet.)	51 semester hours
2. Business and Economics Core ACC 201*, 202*; BLA 201* or MGT 313; ECO 112*, 251, 252, and 335; FIN 325; MGT 300*, 341, and 499; and MKT 301* and 327	39 semester hours
3. Other courses required by business programs: CSC 101 and MAT 107. These courses satisfy and are included under general requirements.	
4. Other course required: MAT 108	3 semester hours
5. Major concentration MGT 313, 321, 431, 441, and 498	15 semester hours
6. Economics or Business Electives	9 semester hours
7. Free Electives	12 semester hours

*A minimum grade of C must be attained in each of these courses.

COURSE DESCRIPTIONS

MANAGEMENT

Symbol: MGT

100 (formerly 101) Introduction to Business (3) Survey of the structure and function of the American business system. Topics covered include forms of business organization, fundamentals of management, fundamentals of marketing, basic accounting principles and practices, elements of finance, money and banking, business and government, and careers in business. Open to nonbusiness majors.
300 (formerly 301) Principles of Management (3) Introduction to the principles and functions of management. Examines the management process, organizational theory, planning, decision making, motivation, and leadership in supervisory contexts. PREREQ: ACC 201, and ECO 111 and 112.
313 (formerly 408/411) Business and Society (3) An analysis of the social, political, legal, environmental, and ethical problems faced by business firms. PREREQ: MGT 300.
321 (formerly 402) Organization Theory and Behavior (3) Study of the theoretical foundations of organization and management. The system of roles and functional relationships. Practical application of the theory through case analysis. PREREQ: MGT 300.
333 (formerly 334) Labor Relations (3) Rise of the American labor movement. Labor legislation. Collective bargaining arrangements. Procedures in settling labor disputes. Organized labor's policies and practices. PREREQ: MGT 300.
341 (formerly 303) Production and Operations Management (3) Methods analysis, work measurement, and wage incentives. Production process and system design. Plant location, layout, sales forecasting, inventory, production, and quality control, to include statistical aspects of tolerances, acceptance sampling, development of control charts, PERT, and cost factors. PREREQ: CSC 101 or equivalent; ECO 111, 112, 251, 252; MAT 107 and 108; and MGT 300.
431 (formerly 302/331) Human Resource Administration (3) Study of a well-planned, properly executed, and efficiently evaluated approach to manpower recruitment, screening, usage, and development. Case analysis and/or experiential exercises to illustrate the concepts used. PREREQ: MGT 300 or permission of instructor.
441 (formerly 406) Introduction to Management Science (3) Business problems in production, inventory, finance, marketing, and transportation translated into application of scientific methods, techniques, and tools to provide those in control of the system with optimum solutions. PREREQ: MGT 341 or permission of instructor.

451 (formerly 407) Systems Management (3) Application of systems theory and principles to the operation of contemporary organizations with emphasis on nonquantitative methods of analysis. PREREQ: MGT 321.

471 (formerly 401) Entrepreneurship (3) Organization of a business venture with emphasis on risk, requirements, roles, and rewards. Students develop a simulated venture, with oral and written report. PREREQ: ACC 201 and 202, FIN 325, MGT 300, MKT 301, or permission of instructor.

◆ **483 (formerly 450-451) Management Internship (3)** The management internship is designed to enhance the student's educational experience by providing a substantive work experience in the business world. PREREQ: Internship program coordinator's approval.

486 Management Internship (6) The management internship is designed to enhance the student's educational experience by providing a substantive work experience in the business world. PREREQ: Internship program coordinator's approval.

487 (formerly 490) Special Topics in Management (3) This course deals with current concepts in management not covered by existing courses. The course content is determined at the beginning of each semester. PREREQ: MGT 300.

◆ **488 (formerly 410) Independent Studies in Management (1-3)** Special research projects, reports, and readings in management. Open to seniors only. PREREQ: Instructor's approval.

498 (formerly 400) Senior Seminar in Management (3) Students are engaged in reading and research on current developments in management. Research project is required to help expand and deepen the horizons of the participants. PREREQ: Senior standing, MGT 300. Seniors eligible for graduation at the end of the coming semester take priority for registration during the preregistration period.

499 (formerly 405) Business Policy and Strategy (3) A capstone course for all business majors, requiring students to integrate and apply multidisciplinary knowledge and skills in actively formulating improved business strategies and plans. Case method predominates. Written reports. PREREQ: Senior standing in ACC, ECO, FIN, MKT, or MGT major; *prior completion* of all courses in Business and Economics Core except ECO 335. Seniors eligible for graduation at the end of the coming semester take priority for registration during the preregistration period.

MANAGEMENT INFORMATION SYSTEMS

Symbol: MIS

300 (formerly 200) Introduction to Management Information Systems (3) A comprehensive introduction to the role of information systems in an organizational environment. This course focuses on transforming manual and automated data into useful information for managerial decision making. PREREQ: MGT 300.

451 (formerly 350) Systems Analysis and Design (3) The course develops the necessary skills for analysis of organizational environments in light of information system needs, as well as the skill to design such systems. PREREQ: MIS 300.

453 (formerly 360) Decision Support Systems (3) This course is an advanced presentation of the role of management information systems in the special support needs of managers for aiding decision making. PREREQ: MIS 300, 451, and MGT 441.

INTERNATIONAL BUSINESS

Symbol: INB

300 (formerly 301) Introduction to International Business (3) Analysis of international business transactions in large and small businesses, multinational and domestic. Functional emphasis on multinational environment, managerial processes, and business strategies. PREREQ: MGT 300.

469 (formerly 402) International Management Seminar (3) Study of issues confronting executives as they plan, organize, staff, and control a multinational organization. Lectures, case analyses, and outside projects with local firms engaged in, or entering, international business will be utilized. PREREQ: INB 300 and MGT 300.

◆ This course may be taken again for credit.

Department of Marketing

John Redington, *Chairperson*

ASSOCIATE PROFESSORS: Morgan, Redington

ASSISTANT PROFESSORS: Gault, Tomkowicz

The primary objective of the Department of Marketing is to prepare students for careers in business and government.

To accomplish this, the faculty of the Department of Marketing will strive:

(1) to create an understanding of the role that marketing plays in the American and foreign social and economic systems

(2) to create an understanding of the scope and content of marketing as an apparatus of the mind used to reconcile company profitability with customer satisfaction and social responsibility

(3) to assist students in acquiring skills required for a successful marketing career in business in the United States as well as in foreign countries

(4) to offer students the opportunity to learn and use modern management technologies

(5) to understand the legal and ethical framework of competition and business conduct

The B.S. in MARKETING focuses on activities required to get goods and services from producers to consumers. Emphasis is on understanding consumers' needs and designing strategies to meet these needs.

DEGREE REQUIREMENTS:

1. General Requirements, see pages 35–39 (Include ECO 111*. See appropriate curriculum guidance sheet.)	51 semester hours
2. Business and Economics Core ACC 201*, 202*; BLA 201*; ECO 112*, 251, 252, and 335; FIN 325; MGT 300*, 341, and 499; and MKT 301* and 327	39 semester hours
3. Other courses required by the business program: CSC 101 and MAT 107. These courses satisfy and are included under the general requirements.	
4. Other course required: MAT 108	3 semester hours
5. Major concentration courses: MKT 303, 320 or 321 or 322, 400, 404, and 408	15 semester hours
6. Economics or Business Electives	9 semester hours
7. Free Electives	12 semester hours

*A minimum grade of C– must be attained in each of these courses.

COURSE DESCRIPTIONS

LAW

Symbol: BLA

201 American Legal System (3) Examines the enforcement of social goals on business organizations through law. The constitutional basis for administrative regulation of businesses, the practice and nature of administrative regulation and administrative procedure, and the principal subjects of current administrative regulation will be surveyed.

302 Special Subjects in Business Law (3) In-depth coverage of the legal topics of contracts and sales. It is intended as a partial preparation for the uniform Certified Public Accountant (CPA) examination and thus provides students with an adequate knowledge of the most widely examined subjects. Provides marketing students with a detailed knowledge of the legal topics that they will use in their careers and covers basic legal topics highly useful to management majors and all persons engaged in business.

◆ **303 Legal Problems in Business (3)** Special legal problems in business will be considered at

◆ This course may be taken again for credit.

length, such as consumer credit regulation, insurance, personal law relating to decedent's estates and Social Security, preparation for the CPA examination, etc. This course may be taken more than once (but not more than three times) for credit if the subject matter of the course is not duplicated.

INTERNATIONAL BUSINESS

Symbol: INB

302 International Legal Environment (3) Study of laws governing international economic activities, and public and private law (conflicts of laws). Basic differences between American and foreign legal systems will be analyzed. Differences in organizing companies, securities laws, antitrust laws, and trade regulations also are studied.

MARKETING

Symbol: MKT

301 Principles of Marketing (3) A study of marketing in our consumer-oriented society and the management of marketing activities, including buying, selling, promotion, physical distribution, product planning, and consumer behavior. PREREQ: ECO 112.

303 Consumer Behavior (3) Foundations of consumer behavior. Market structure and consumer behavior, purchase strategy and tactics, determinants and patterns of consumer behavior. An integrated theory of consumer behavior is sought. PREREQ: MKT 301.

320 Managing Sales (3) Source, technique, and theories applied to problems encountered in managing a sales force in the areas of administration, policy, organizational structure, personnel selection and evaluation, sales training, compensation, forecasting, establishing territories and quotas, and sales analysis. Emphasis on case studies. PREREQ: MKT 301.

321 Salesmanship (3) Analysis of the selling process applied to sales calls and sales strategies, communication, persuasion, motivation, ethics, interpersonal relationships, negotiations, and professionalism. Emphasis on case studies. PREREQ: MKT 301.

322 Advertising and Sales Promotion (3) A study of advertising and sales promotion management with a major focus on organization, media, strategy, campaigns, legal control, consumer behavior, budgeting, and the coordination of these activities with overall marketing programs. PREREQ: MKT 301.

327 Marketing Management (3) Study of policy decision making. Organization and analysis of marketing opportunities. Policy decisions regarding product, price, marketing channels, physical distribution, advertising, and sales marketing models and systems. PREREQ: MKT 301.

400 Senior Seminar in Marketing (3) A capstone course designed to offer the student practical experience in the practices and policies of the American marketing system. A deeper understanding and appreciation of the marketing executive's effort to balance the firm's objectives with existing or potential market opportunities. The class works in groups. Emphasis on field work, consulting, computer simulations, and case development. PREREQ: Senior standing or permission of instructor

401 Marketing Channels (3) Distribution strategies, including efficient planning of space, time, and distribution costs to meet consumer demand; alternatives in channel structure, policies, management, and leadership; methods for improving channel performance; channel strategy in the future. PREREQ: MKT 301.

404 International Marketing (3) Historical and theoretical background of foreign trade, world marketing environment and world market patterns, marketing organization in its international setting, and international marketing management. PREREQ: MKT 301.

408 Marketing Research (3) Systematic definition of marketing problems, strategies for data collection, model building, and interpretation of results to improve marketing decision making and control. PREREQ: ECO 251 and 252, and MKT 301.

410 Independent Studies in Marketing (1-3) Special research projects, reports, and readings in marketing. Open to seniors only. PREREQ: Permission of instructor.

450-451 Marketing Internship (3-6) The marketing internship is designed to enhance the student's educational experience by providing a substantive work experience in the business world. PREREQ: Permission of internship program coordinator.

490 Special Topics in Marketing (3) Special topics in marketing not covered under existing, regularly offered courses. PREREQ: MKT 301 and permission of instructor.

Department of Political Science

Louis F. Weislogel, *Chairperson*

PROFESSORS: Marbach, Milne, Shea

ASSOCIATE PROFESSORS: Burns, Burton, Eldredge, Iacono, Sandhu, Smith, Weislogel

ASSISTANT PROFESSORS: Polsky, Schnell

The department offers a variety of programs tailored to students' career goals and allows a wide range of options following graduation.

Bachelor of Arts—Political Science is a general liberal arts program exposing the student to the broad areas of political science, including American government, international relations, comparative government, public administration, political behavior, and political theory.

Bachelor of Arts—Political Science/Public Administration is for students who plan a career in public service. It includes relevant courses from the geography and planning area.

Bachelor of Arts—Political Science/International Relations is for students with a primary interest in international affairs and includes relevant cognates in several disciplines.

All three Bachelor of Arts programs are intended for students with an interest in government and public service, journalism, and the law.

Bachelor of Science in Education—Social Studies offers concentrations in general social studies, geography, and political science.

The department also sponsors pre-law advising, the Law Society, and the Political Science Club.

BACHELOR OF ARTS—POLITICAL SCIENCE

The B.A. in political science is designed for those having an interest in understanding their society and the world. It has the same broad relevance as other liberal arts degrees and special relevance for careers in such fields as pre-law, politics, public relations, and journalism. Internships may be arranged.

1. General Requirements, see pages 35–39 — 51 semester hours
2. Foreign Language/Culture Requirements — 0-15 semester hours
3. Three additional social science courses in each of three disciplines not selected under General Requirements, plus HIS 152 — 12 semester hours
4. Political Science Requirements — 33 semester hours
   A. American Government and Politics (PSC 100) and Foundations of Political Science (PSC 200)
   B. One course in each of the following six fields: international relations, political behavior, political theory, comparative government, American government, and public administration
   C. Political Science Symposium (PSC 399) or approved substitute elective
   D. Senior Project (PSC 401)
   E. Two additional political science courses above the 100 level
5. Additional Free Electives — up to 30 semester hours

BACHELOR OF ARTS—INTERNATIONAL RELATIONS

The international relations concentration is intended for the student who wishes to deepen his or her understanding of world affairs. It is appropriate for students planning careers in areas related to international affairs as well as pre-law, politics, and journalism.

1. General Requirements, see pages 35–39 — 51 semester hours
2. Foreign Language, intermediate level — 0-12 semester hours
3. Political Science Requirements — 18 semester hours
   A. Core: PSC 100 or 121, 200, 213, 217, 359 or 399, and 401 or 402
   B. Required Cognate: HIS 330 or 357 — 3 semester hours
   C. Additional International Cluster (two of the following): PSC 256, 311, 315, 316, 317, 319, and 414 — 6 semester hours
   D. Related Political Science (three of the following): PSC 240, 246, 340, 341, 342, 343, 348, and 349 — 9 semester hours
4. Related Cognates (See guidance sheet.) — 15 semester hours
5. Additional Free Electives — up to 30 semester hours

Minor in Political Science — 18 semester hours

Students may minor in general political science or in one of the subfields such as international relations. Students take PSC 100 plus five courses in a concentrated area, or (at least two) areas under departmental advisement.

This minor may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

COURSE DESCRIPTIONS
POLITICAL SCIENCE

Symbol: PSC, unless otherwise indicated

★ 100 **American Government and Politics (3)** Devoted to understanding how the system works: political action, elections, interest groups, civil liberties, Congress, the presidency, and the courts are among the topics considered. Seeks to provide a framework in terms of which process and current issues become meaningful. Offered each semester.

★ 121 **Introduction to Government and Politics (3)** Survey of fundamental concepts in political science. Considers nature of the state, freedom, sovereignty, equality, theories of representation, and other areas. Offered each semester. Nonmajors only.

200 **Foundations of Political Science (3)** Incorporates techniques for analyzing political questions logically and systematically, and introduces basic research design and methodological and library usage skills appropriate to the political science discipline. Required course for B.A. majors in political science, public administration and international relations and the B.S. in Education with a political science concentration. Optional course for minors in political science, public administration, and international relations. PREREQ: PSC 100. Cannot be used to meet University general education requirements. Offered each semester.

≠204 **Introduction to Urban Studies (3)** An examination of the breadth of urban studies from the perspectives of many social science disciplines. Philadelphia is emphasized as an object of perception, as a place of life and livelihood, and as an example of continual change in the urban environment. PREREQ: ENG 121.

★ 213 **International Relations (3)** Politics among nations, including politics carried on through international organizations. Examines power politics, techniques of diplomacy, and methods of current international organizations. Special attention to U.S. interests and policies. Offered each semester.

217 **American Foreign Policy (3)** Cultural, political, economic, and psychological influences on policy; process of decision making. Special attention to a few policy areas such as relations with allied, underdeveloped, revolutionary, or Communist countries. Possible response to threats of war, population growth, resource shortages, and pollution may be examined.

240 **Introduction to Comparative Politics (3)** An introduction to the comparative study of political systems at various stages of cultural, social, economic, and political development.

■ 246 **Soviet Politics (3)** Marxism-Leninism, the functioning of the political system, and its domination of all areas of Soviet life. Some brief attention to the conduct of Soviet foreign policy.

252 **Civil Liberties and Civil Rights (3)** A survey of the sources of civil liberties and civil rights in the United States with an inquiry into contemporary problems and their solutions through statutory and constitutional developments.

256 **Energy and the Political Process (3)** Stresses the process of policy making and implementation in the field of energy. Emphasis also is given to foreign policy and natural security implications.

301 **Women in Politics (3)** The role of women in politics is surveyed. Considerations include the relationship between the sexes as it impacts politics.

311 **Soviet and Post-Soviet Foreign Policy (3)** Emphasis on Soviet-American relations since 1945 and a comparison of the two societies. Topics treated include the influence of Marxism, Great Russian nationalism, and historical experience on Soviet foreign relations. PREREQ: PSC 213 or 246 or permission of instructor.

312 **Politics of Modern Nationalism (3)** An analysis of political processes in the former Soviet Union and Eastern Europe, Western Europe, and the Middle East. The role of nationalism in these countries after the demise of communism. The rise of nationalism in the Middle East and Western Europe.

315 **War or Survival (3)** Examines the use of military force, and the economic, social, and political impact of militarization and nuclear weapons strategy. Considers arms control and disarmament, alternative security systems, and the citizen's role.

316 **World Order: Problems, Approaches, and Prospects (3)** Examines global interdependence, conflict, and cooperation regarding contemporary and future world problems, such as nationalism, resources, etc. Considers alternative approaches to cooperation and means of bringing about change.

317 **Contemporary International Relations (3)** Recent issues and problems with special emphasis on superpower behavior around the world. Also, third world revolutions, international terrorism, human rights, international law and the United Nations, and the changing international economic order.

319 **Middle Eastern Politics (3)** Topics include the Arab-Israeli conflict, the politics of the Persian Gulf, the role of OPEC, and the superpower conflict in the region.

322 **Public Opinion, Propaganda, and Political Behavior (3)** The dynamics of opinion formation and change, and the role of public opinion in policy formation. Political socialization, survey research and political socialization, survey research, and propaganda techniques also are considered.

323 **Racial and Ethnic Politics (3)** This course examines the relationship between racial and ethnic groups' political behavior and the American political system's response to them in terms of its public policies.

324 **American Political Parties (3)** Patterns, functions, and history of the American political party system at national, state, and local levels. Theoretical and empirical studies of political interest groups, public opinion, and voting behavior.

329 **Judicial Behavior (3)** A behavioral approach to the law, with specific reference to conceptual, methodological, and ideological considerations. Depending on the availability of information, role-playing simulations will be used with students portraying judges and attorneys.

338 **Introduction to Political Thought (3)** Great political thinkers of Western civilization from Plato to the present. Historical background of Western thought and its relevance to the present political world.

339 **Contemporary Political Thought (3)** Consideration of major political thinkers since Marx. Includes writings and political significance of Marcuse, Fromm, Lenin, Trotsky, and the Democratic Socialists.

■ 340 **Latin-American Culture and Politics (3)** Comparative analysis of contemporary Latin-American systems. Political cultures, decision making, ideologies, and political processes. Emphasis is on Mexico and Central America. Offered each semester.

341 **Politics of Non-Western Areas (3)** Emphasis on the general problems of nation building, political participation, and elite-mass relationships in less-developed nations. African nations, Latin America, or Asia may be emphasized. PREREQ: PSC 100 or equivalent.

■ 342 **Government and Cultures of Western Europe (3)** Primary attention focuses on France, West Germany, and Great Britain; secondary attention is on other European systems. Political cultures, popular participation, political parties, and formal institutions of government. PREREQ: PSC 100 or equivalent.

343 **Culture and Politics of Asia (3)** Study of cultural, philosophical, and political systems of modern Asia with special emphasis on China, Japan, and India

★ Approved distributive requirement course.
≠ Approved interdisciplinary course.
■ Culture Cluster

348 **African Culture and Politics** (3) The political nature and practices of individuals, organizations, and governments of Black Africa are examined in the cultural context of the contemporary independent period. PREREQ: PSC 100 or equivalent.
349 **Comparative Communism** (3) Comparative analysis of the ideological, political, social, and economic systems of Communist nations. Concentration is on comparisons between the Soviet Union and Communist China, but other Communist systems also are considered. PREREQ: PSC 100 or equivalent.
350 **American Constitutional Law** (3) The development of the American constitutional system as reflected in leading decisions of the United States Supreme Court. Emphasis on national powers, federalism, and the Bill of Rights. PREREQ: PSC 100 or permission of instructor.
355 **Congressional Politics** (3) Deals with the internal and external factors that influence Congressional behavior, including the roles of constituents, pressure groups, parties, the committee system, rules, and the leadership. Their relationships to the president and court structure and their impact on electoral politics also are considered. Comparisons with state legislatures.
356 **American Public Policy** (3) Policy formation and execution. Policy areas considered vary from semester to semester. May include role-playing. PREREQ: PSC 100 or 101 or permission of instructor.
359 **The American Presidency** (3) In-depth analysis of the nature and significance of the American presidency, including constitutional development, presidential roles and customs, the recruitment process, the executive branch, and the politics of the presidency. PREREQ: At least a C in PSC 100 and junior-level status, or permission of instructor.
399 **Political Science Symposium** (3) Nature of research in political science. Construction of a research design. Extensive reading in an area of political science. Offered each semester.
HBI 400, 401, 402 **Harrisburg Internship Seminar** (15) A full-semester internship in Pennsylvania state government. Student intern is placed in cabinet-level or legislative office. Placement (9 cr.); Policy Research Project (3 cr.); Policy Seminar (3 cr.). The internship is open to any junior or senior student, regardless of major, who has a minimum GPA of 3.50. Stipend involved.
400 **Senior Seminar in Political Science** (3) Research in political science. Methodology, bibliography, and presentation, both oral and written. The research paper for the seminar must be acceptable as a required departmental senior research paper.
401 **Senior Project in Political Science** (3) Execution of the research design constructed in PSC 399. Involves completion of a major senior paper under supervision of a staff member. Extensive independent effort. PREREQ: PSC 399. Offered each semester.
402 **Seminar in International Relations** (3) Theme centered with capstone paper. Senior I.R. majors only.
410 **Independent Studies in Political Science** (1-3) Research projects, reports, and readings in political science. Open to seniors only. PREREQ: Permission of instructor.
◆ 412 **Internship in Political Science** (3-15) Upper-level student field placement learning. Short-term, 3- to 6-hour experiences in political settings under faculty advisement; and 9- to 15-hour placements in state, federal, local government or public service agencies. Learning contracts and faculty advisement create a whole experience from exposure to government administration and politics. Offered each semester.
414 **International Theory** (3) General theory applied to specific case studies. Advanced readings.

◆ This course may be taken again for credit.

Political Science/Public Administration Programs

BACHELOR OF ARTS — POLITICAL SCIENCE/ PUBLIC ADMINISTRATION

The B.A. in political science with a concentration in public administration is interdisciplinary and intended to prepare students for a variety of possible alternatives in state, local, and federal government as well as with private interest groups. The program features internship experiences with participating agencies.

1. General Requirements, see pages 35–39 51 semester hours
2. Foreign Language/Culture Requirements 0-15 semester hours
3. Additional Social Science Courses 9 semester hours
   In each of two disciplines not selected under General Requirements, plus HIS 152
4. Public Administration Concentration 21-27 semester hours
   GEO 214; PAD 361 or 363, 364, 375 or 376, 377, and 378; PSC 356 or PAD 374, plus two additional geography and planning courses taken under advisement
5. PAD 412 Internship 0-15 semester hours
6. Political Science Symposium (PSC 399) or approved substitute elective
7. Senior Project (PSC 401) 3 semester hours
8. PSC 100, 200, and one additional course at 200 or 300 level 9 semester hours
9. Cognate Requirements 6 semester hours
   COM 208 or 230, and MAT 103 or 121
10. Additional Free Electives up to 24 semester hours

Minor in Public Administration **21 semester hours**

Students take PAD 364 and PSC 100 plus five additional courses in public administration under departmental advisement. This minor may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program.

COURSE DESCRIPTIONS POLITICAL SCIENCE/PUBLIC ADMINISTRATION

Symbol: PAD

361 **State and Local Government** (3) Examination of the organization, functions, and politics of state and local government, including analysis of politics in states, counties, cities, and towns in urban, suburban, and rural areas. Intergovernmental relations in education, transportation, and welfare policy are examined.
363 **Urban Government** (3) Structures and processes of central city and suburban government are considered. Examines patterns and trends in governmental organization and administration as well as sources of conflict in urban decision making, e.g., the urbanization process, race and class antagonism, and city-suburban perspectives.
364 **Elements of Public Administration** (3) Considers public administration in the United States as a process of implementing public policy. Uses case studies and projects with texts focusing on organizational theory, human behavior and motivation, budgeting, personnel, and administrative responsibility. Offered each semester.
369 **Politics of Bureaucracy and Administrative Behavior** (3) In-depth examination of the fourth branch of government. Impact of the administration apparatus (bureaucracy) on public policy formulation and implementation. Case studies and student projects.
373 **American Intergovernmental Relations** (3) Designed to familiarize students with the complex network of conflict, cooperation, and interdependence among national, state, and local government units. Topic areas, among others, include an analysis of the continuing evolution of American federalism, an examination of this relationship from state and city government perspectives, and a description of specific intergovernmental fiscal programs and policies.
374 **Municipal and Administrative Law** (3) An in-depth examination of the impact of municipal law and local regulation and its social, economic, and political impact. Attention to areas such as zoning.
375 **Government Finance** (3) Policy choices for public sector economic activity. National, state,

and local activities in allocation, distribution, and stabilization functions; grants-in-aid; taxation. Student projects in revenue studies. PREREQ: ECO 101 or 111, and PAD 364.

376 Government Budgeting (3) Institutions and processes of budget formulation, authorization, and implementation at national, state, and local levels. Varying formats for budgets, line-items, PPBS, zero-base, and PDS will be developed by students for some unit of government. PREREQ: ECO 101 or 111, and PAD 364.

377 Government Personnel and Management (3) Examination of governmental recruitment practices, including current personnel classification and compensation policies, as well as government selection, recruitment, and promotion procedures. Managerial functions of oversight, supervision, and motivation are heavily emphasized. PREREQ: PAD 364 is recommended.

378 Public Organizations: Theory and Practice (3) Nature of public organizations such as government agencies. The environment of their operations, relations to public and private organizations, and theories of their structure and behaviors, stressing the public setting and political processes that provide their functioning environment.

◆ 412 Internship in Public Administration (3-15) Same as PSC 412, but for students with public administration concentration. PREREQ: PAD 364. Offered each semester.

◆ This course may be taken again for credit.

Social Studies With Concentrations in Political Science

Students interested in teaching secondary school social studies may pursue a concentration in political science while earning state certification and the Bachelor of Science in Education degree. See the description of the Social Studies section on page 116.

Department of Social Work

Mildred C. Joyner, *Chairperson*

ASSOCIATE PROFESSORS: Bartlett, Ross, Siegel

ASSISTANT PROFESSORS: Hodgins, Joyner, McCutcheon

The social work program is accredited on the baccalaureate level as a professional degree in social work by the Council on Social Work Education.

The social work program's field of study focuses on a generalist model using the problem-solving method to develop a solid foundation of knowledge, values, and skills leading to competency for the entry level of social work practice. The student applies theory to practice in varied field experiences in the sophomore, junior, and senior years.

The objectives of the Department of Social Work are:

1. To develop competence in beginning practice skills at micro, mezzo, and macro levels of practice appropriate for social workers' assessments and interventions in the complex, rapidly growing southeast region of Pennsylvania.
2. To understand and employ a systems framework within which students learn to focus on all levels of needs and interventions, e.g. individuals, groups, organizations, communities, state, and federal systems.
3. To develop sensitivity in students to issues of inequality, social injustice, and empowerment.
4. To instill a commitment to lifelong learning and to enhance one's own professional practice.

Students interested in majoring in social work should take Development of Professional Self (SWO 220) and Introduction to Social Welfare I (SWO 200) during the fall and spring semesters of their freshman year. Students are required to maintain a GPA of 2.25 for up to 64 earned credits and a 2.50 for 65 or more earned credits in order to continue in the social work program. A student needs a 2.75 overall GPA to be eligible for certification upon graduation by the Council of Social Work Education.

There is a continuing evaluation process on all students in the program. All students are expected to demonstrate attitudes and behavior consistent with the values and ethics of professional social work and the Social Work Code of Ethics.

Policy for Social Work Majors

Majors are required to meet with their social work adviser to plan an integrative course of study, to select courses prior to scheduling, to discuss career opportunities, and to keep abreast of departmental activities. Handbooks are provided to help students be aware of requirements and procedures in the department. Social work majors should be aware of prerequisite courses and must see their adviser before registering for classes.

Academic Promotion Policy

Social work students who have a grade of I (Incomplete), D, or F in required courses must repeat these courses and achieve a satisfactory grade before entering the junior field placement. Not achieving at least a C– in social work required courses is considered grounds for dismissal from the social work program.

Department-Related Activities

The Social Work Club is a student organization that involves department faculty and resources. The activities of this organization are open to all students. The honor society, Phi Alpha, is sponsored by the Department of Social Work and is the Chi Gamma Chapter of the National Social Work Honor Society. Eligibility requires an overall GPA of 3.0 and 3.5 in required social work courses. For more information, see the Student Activities and Service Organization sections of the catalog.

Transfer Students

Transfer credit will be granted for freshman- and sophomore-level courses if (a) the course descriptions are equivalent and (b) the grades are C or above in social work related courses. All required courses in professional social work education that are required by the Council on Social Work Education must be taken in the accredited program. (*Exception:* students transferring from a social work program that is accredited by C.S.W.E.) Transfer students can be admitted in September or January.

INTERNAL TRANSFER STUDENTS (undeclared majors and change of majors) who desire admission to the Department of Social Work may apply after meeting with the department chairperson. Students must have a cumulative GPA of 2.25 for up to 64 earned credits, and a 2.50 for 65 or more earned credits, plus an interview and completion of a change of major form to gain admittance into the program.

STUDENTS TRANSFERRING FROM VARIOUS COLLEGES AND UNIVERSITIES who desire admission to the Department of Social Work may apply only with a GPA of 2.25 for up to 64 earned credits, and a 2.50 for 65 or more earned credits.

Department Field Placements and Volunteer Experiences

Social work students do volunteer experience in the freshman year. During the second semester of the junior year and in both semesters

of the senior year, students will be placed in various social work agencies (see partial listing of social work field placements).

Students must have completed SWO 200, 220, 300, 320, 350, and 351 before they register to take the Junior Field Placement in the spring semester.

INSURANCE. Students are required to carry liability insurance coverage in the amount of $1,000,000/3,000,000 during the second semester of their junior and the entire senior year at a yearly cost of approximately $30.00. Students may join the National Association of Social Workers to receive liability insurance at a reduced rate.

Social Work Field Placements

Students have been placed with the following organizations to fulfill their field experience requirements:

Juvenile Court of Delaware County
Brandywine Hospital
Women's Alternatives
Chester County Board of Assistance
Chester County Children's Services
Crozer Chester Medical Center
Delaware County Children and Youth
Delaware County Intermediate Unit
Help Counseling Drug and Alcohol Program
Family Service-Mental Health Centers of Chester County
United Cerebral Palsy of Chester County
Travelers Aid Society
West Chester Area Schools
A.I. DuPont Institute
Ronald MacDonald House
Planned Parenthood
Chester County Services for Seniors
Eagleville Hospital
Delaware County Juvenile Court
Haverford State Hospital
First Step of Chester County
Paoli Hospital
Pathway School
Philadelphia Psychiatric Center
Veteran's Administration
Domestic Relations Court
Housing Authority of Chester County, Coatesville Project

BACHELOR OF ARTS—SOCIAL WORK

1. General Requirements, see pages 35–39	51 semester hours
2. Foreign Language/Cluster Requirements (second half of the intermediate year)	3-15 semester hours
3. Social Science Cognates	9 semester hours
4. Social Work Concentration SWO 200, 201, 220, 225, 300, 320-321, 350-351, 375, 395, 431, 432, 450-451, and 495-496	57 semester hours
5. Cognates (Psycho-Social Foundation)	3 semester hours
6. Electives	6 semester hours

Social work majors should choose, with help from their advisers, interdisciplinary electives geared to their learning needs and professional interests.

Minor in Social Work — 18 semester hours

A minor in social work offers students (1) an understanding of the purposefulness of human behavior, (2) a professional method with which to deal effectively with that behavior, and (3) knowledge of the varied fields of practice of social work and how they relate to the student's chosen major field. Students will not be permitted to take social work field practice courses. In some instances a collaborative field internship with the student's major discipline will be designed.

Students take SWO 200, 201, 225, 300, 320, and 321 and an elective social work course. Other courses may be selected under advisement.

To declare a minor, students must see the minor adviser and complete the declare of minor forms.

COURSE DESCRIPTIONS
SOCIAL WORK
Symbol: SWO

PRIMARILY FOR FRESHMEN AND SOPHOMORES

200 Introduction to Social Welfare (3) Current social problems and the influence of societal values on their definition and the structures devised to meet them. Two hours per week of volunteer experience in a social agency is required.

220 The Development of a Professional Self (3) Students are provided background knowledge and skills to function professionally in society. The course adopts the psychological perspective that links self-concept and its development with group behavior, the function of social reality, and social role.

222 Human Service Professionals and the Law (3) A study of legislation and case law affecting social welfare programs for the development of an understanding of legal reasoning and key areas of legal knowledge.

225 Race Relations (3) Emphasis is placed on racial awareness by examining racial, ethnic, and cultural differences of minority groups in the United States. Offered in the fall and spring semesters.

B.A. COURSES FOR SOCIAL WORK MAJORS AND OTHER UPPERCLASSMEN

201 Social Welfare Policies and Services (3) The history of social welfare in the United States, and an overview of major fields of social work practice with emphasis on legislation and policy formulation.

300 Family Systems I (3) Introduction to selected items in systems analysis, emphasizing application to understanding family systems and the organizational framework of human behavior. Offered in the fall semester only.

320 Principles and Methods of Social Work Practice I (3) The integration and application of the general list model to the problem-solving method of social work. Offered in the fall semester only.

321 Principles and Methods of Social Work Practice II (3) A continuation of SWO 320. Offered in the spring semester only.

350 Psycho-Social Foundations of Human Behavior I (3) Examination of life stages of early childhood through adolescence. Offered in the fall semester only.

351 Psycho-Social Foundations of Human Behavior II (3) Continuation of SWO 350. Focus on middle adulthood to aging. Offered in the spring semester only.

421 Mental Health and Social Work Practice (3) The scope of mental health services and specific practice skills for social work with mentally disturbed or retarded clients only.

423 Special Skills in Child Protective Services (3) Emphasis is placed on understanding child abuse and neglect, assessment of persons in crises, and treatment for the abused and neglected child in today's society.

431 Methods of Social Inquiry (3) Fundamen-tals of problem identification, research design, sampling, observation, data collection and reduction, and non-statistical analysis. Offered in the spring semester only.

432 Advanced Social Welfare Policies and Services (3) A theoretical framework for the analysis, formulation, implementation, and change of social policy, governmental guidelines, and social legislation. Offered in the fall semester only.

COURSES FOR SOCIAL WORK MAJORS ONLY

375 Field Placement (3) Junior-year field experience for the social work major. Offered in the spring semester only.

395 Junior Seminar A practice seminar designed to relate to the student's field placement. Offered in the spring semester only.

◆ **410 Independent Studies in Social Work** (1-3) Special research projects or practices in social work. Juniors and seniors only. PREREQ: Permission of department chairperson. Offered in the fall, spring, and summer semesters.

◆ **450-451 Field Experience I-II** (6) (6) Supervised work experience in a social agency. Seniors only. Offered in the fall and spring semesters.

◆ **495 Senior Seminar in Social Work** (3) Integration of field and classroom experiences in discussing the application of the generalist model to the helping process. Offered in the fall semester.

496 Social Work Process Seminar (3) Seminar on the social work process designed to relate to the second semester field experience. Offered in the spring semester.

◆ This course may be taken again for credit.

School of Education

Michael Hanes, *Dean*

Department of Childhood Studies and Reading

Mary Ann Maggitti, *Chairperson*

Gail G.K. Bollin, *Assistant Chairperson*

David F. Brown, *Assistant Chairperson*

PROFESSORS: Christensen, Grasty-Gaines, Keetz, Maxim, Radich, Ziegler

ASSOCIATE PROFESSORS: Adams, Dunlap, Hasson, Maggitti, Peters, Szabo

ASSISTANT PROFESSORS: Baloche, Beeghly, Bollin, Brown, Darigan, Drobnak, Egan, Gibson, Khoury, Kletzien, Platt, Prudhoe, Stahler

The Department of Childhood Studies and Reading certifies teachers for elementary education (K-6) and early childhood education (NK-3).

The B.S. Ed. in ELEMENTARY EDUCATION curriculum is designed to provide a broad background of general education, an understanding of children, and the knowledge and skills needed to teach all aspects of the elementary school program. Upon satisfactory completion of the approved program, the student will qualify for a Pennsylvania Instructional I Certificate, valid for six years of teaching in kindergarten and grades one through six.

The B.S. Ed. in EARLY CHILDHOOD EDUCATION curriculum is designed to provide both the liberal education and special preparation required for careers in public and private school teaching and directorship and supervisory work in early childhood programs other than those under the auspices of the public schools. Upon satisfactory completion of the program, the student will qualify for a Pennsylvania Instructional I Teaching Certificate valid for six years of teaching in preschool, kindergarten, and grades one through three.

REQUIREMENTS COMMON TO BOTH PROGRAMS

1. General Requirements: see pages 35–39 — 51 semester hours
   Includes MAT 101 and requirements in art, literature, philosophy, psychology, and computer literacy
2. Professional Education — 12 semester hours
   EDF 100, EDM 300, EDP 250 and 351+

BACHELOR OF SCIENCE IN EDUCATION — ELEMENTARY EDUCATION
(Curriculum K-6)

1. Specialized Preparation — 61 semester hours
   EDE 200, 251+, 310+, 311+, 312+, 332+, 352+, 401+, 406+, 410+, and 411+; HEA 301; LIT 395; MAT 102+ and 351++; MUE 231; PED 200; and SCE 310+
2. Elective Area — 6 semester hours

NOTE: Physical education courses may count toward the general requirements.

BACHELOR OF SCIENCE IN EDUCATION—EARLY CHILDHOOD EDUCATION
(Curriculum NK-3)

Specialized Preparation — 70 semester hours
ECE 100, 221+, 225+, 231+, 232, 306, 307, 310, 320, 321+, 325+, 405+, 410+, 411+; HEA 211; LIT 352; MAT 349+; MUE 232; and PED 449

NOTE: Music and physical education courses may count toward the general requirements.

Application and Approval for Student Teaching

Students must apply through the department for approval for student teaching in early childhood education (ECE 410 and 411) and in elementary education (EDE 410 and 411). To apply, the student must complete 96 semester hours with a cumulative GPA of 2.50 prior to the student teaching semester. As part of the 96 credits, the student must complete all professional education courses and all specialized preparation courses with a GPA of 2.50. (See also student teaching, page 118.)

An application for student teaching must be filed in November prior to the academic year in which student teaching is to be scheduled. Application meetings will be announced at the beginning of the fall semester each year. Students register for student teaching as they would for any other University courses.

Field Placement in Schools

West Chester University does not place students at religiously affiliated schools when that placement results in the students' receiving academic credit (e.g., student teaching). In addition, the University will make every attempt to first place students into public (vs. private) schools for student teaching and related activities. Further, students will not be assigned student teaching or other related duties at nonsectarian private schools or agencies unless they specifically request such placement. Each request will be considered individually to ensure that the private entity does not receive special benefit from the arrangement that outweighs the benefit to the University and its students.

The following policies apply to all students entering the Department of Childhood Studies and Reading.

INTERNAL TRANSFER STUDENTS (undeclared majors and change of majors) who desire admission to the Department of Childhood Studies and Reading may apply after the completion of 30 semester hours at West Chester University. A cumulative Grade Point Average of 2.25 for students who have earned up to 64 credits and a 2.50 for students who have earned 65 or more credits, plus an interview, are prerequisites for acceptance to the program.

STUDENTS TRANSFERRING FROM COMMUNITY COLLEGES AND JUNIOR COLLEGES who desire admission to the Department of Childhood Studies and Reading may apply only with a Grade Point Average of 2.25 for up to 63 earned credits and a 2.50 for 64 or more earned credits. Transfer credit will be granted for freshman- and sophomore-level courses if the course descriptions are equivalent and in accordance with University policy. All other required courses in the professional education and specialized preparation areas will be evaluated and approved on an individual basis.

MINOR FIELDS OF STUDY IN DEPARTMENT OF CHILDHOOD STUDIES AND READING

A. Early Childhood Education — 15 semester hours
   ECE 231 or EDE 251, ECE 232 (six credits, class and field experience), 324, 405

+ Courses requiring prerequisites—check catalog.
++ Prerequisites are MAT 101 and MAT 102 (unless waived by examination).

B. Elementary Education 18 semester hours
EDE 251, 310, 311, 401, 406, and
EDE elective approved by the department

C. Reading 21-24 semester hours
Required courses for all students: EDE 311 or ECE 310, EDE 312 or ECE 325, EDE 422 or 458, EDR 321, EDR 420

Electives 3-6 semester hours
For all students: COM 307, 415; EDE 401; LIN 250, 380; PSY 475; SPP 101

Students in this department are required to supply their own transportation to field experiences.

COURSE DESCRIPTIONS
CHILDHOOD STUDIES AND READING

Symbol: ECE

***100 Orientation to Early Childhood (3) An introduction to the history and philosophy of early childhood education. Field observations in a variety of settings provide the student with an opportunity for career decision making.

***221 Child Development (0-2 years) (3) Physical, social, emotional, and intellectual development of children from birth to two years of age. Parallels are drawn from this phase of child development to students' self-development. This course must be taken the same semester with ECE 225. PREREQ: PSY 100.

***225 Infant Learning Environment and Field Experience (6) The study and use of developmental tests for the diagnosis of infant needs. The relationship of the developmental level to the structuring of learning environment is fostered as students interact with infants in school and home settings for three hours per week. This course must be taken the same semester with ECE 221.

*231 Child Development (2-5 years) (3) Physical, social, emotional, intellectual, and moral development of the child, 2-5 years of age. Parallels are drawn from this phase of child development to students' self-development. PREREQ: PSY 100.

*232 Preschool Learning Environment (3-6) Methods and materials for structuring the classroom environment for the child 2-5 years of age. Readiness skills and concepts in all curricular areas are addressed.

***306 Child's Social Environment (3) A consideration of methods of instruction that best generate a social education meaningful to primary grade children. Emphasis is placed on providing a learning environment that parallels the maturation of the young child.

***307 Child's Physical Environment (3) A consideration of methods of instruction that best enhance a child's knowledge of the physical world in terms that are meaningful to primary grade children. Strategies for cognitive skills and affective growth in these areas are stressed.

*310 Introduction to the Language Arts (3) The areas of listening, speaking, and writing are studied in depth. Knowledge, teaching, and evaluative techniques are addressed. Introduction to the reading process and the relationship of language to reading also will be studied.

***320 Creative Arts for the Young Child (3) Workshop, seminar, and field experiences provide opportunities for students to explore, manipulate, and analyze a wide variety of media and techniques appropriate for use with young children. Activities are aimed at encouraging the development of the young child's creative potential through the arts.

***321 Middle Childhood and Adolescent Development (5-8 years) (3) Physical, social, emotional, intellectual, and moral development of the child 5-8 years of age. Parallels are drawn from this phase of child development to students' self-development. PREREQ: PSY 100.

*324 Early Childhood Programs (3) Study of contemporary program models in early childhood education. Major trends in the education of young children are defined.

*325 Teaching Reading and Field Experience (Primary Grades) (6) The teaching of reading and its mastery is the focus of this course. Students apply knowledge of theories and practices in supervised field placements in schools with children 5-8 years of age. Tutoring of individual children and small groups is integrated with planning and evaluation of lessons and activities as well as remediation. PREREQ: ECE 310.

*405 Administration and Supervision of Early Childhood Programs (3) Principles of administration and supervision of programs for young children. Includes parent education and community relations. PREREQ: ECE 232.

***410 Student Teaching (6) (First half of semester)

***411 Student Teaching (6) (Second half of semester) Two separate student teaching experiences are required: one in nursery or kindergarten and one in grades 1-3. Weekly practicum sessions are required. PREREQ: See "Application and Approval for Student Teaching" earlier in this section.

◆ 498 Workshop in Early Childhood Education (3) Offers wide variety of experiences to help prepare students to provide an environment for optimal growth of children in preschool and primary grades.

Symbol: EDE

*200 Theory and Field Experiences in Elementary Education (3) Orientation to the curricula, processes, and structures of elementary education today. Field experiences related to course topics.

*251 Child Development and Behavior (3) Emotional, social, mental, moral, physical, and self factors shaping human behavior with emphasis on child and early adolescent development. Specific application to classroom settings. PREREQ: PSY 100.

253 Human Development and Behavior (3) Physical, mental, emotional, social, moral, and self factors shaping human behavior throughout the life cycle; specific application to work with individuals and groups in educational settings. PREREQ: PSY 100.

254 Development in the Middle School Child (3) Characteristic development and behavior of children between 10 and 15 years of age; understanding and working with these children in educational settings. PREREQ: EDE 251 and 253 or their equivalent.

*310 Communication Skills in the Elementary School (3) Study of teaching language skills in the elementary school: listening, speaking, and writing. PREREQ: EDE 251.

*311 Introduction to Reading Instruction (3) An exploratory course investigating the reading process, language and learning theories, and their relation to reading. Historical scope and various programs of reading are studied and evaluated. PREREQ: EDE 251 and 310.

*312 Reading Instruction and Practicum (6) Focus is on mastery of the teaching of developmental reading, early reading, and prereading experiences. The students learn how to plan, teach, and evaluate reading/thinking skills related to the instruction of reading in the elementary classroom. Students work in the public schools with small and large reading groups teaching various aspects of the reading lesson. Students also learn how to evaluate pupil performance and remediate minor reading problems. PREREQ: ECE 311.

315 Developmental Reading for the Handicapped Child (3) The focus of this course is the study of the nature of the reading process and its relation to language development, motivation and methodology for developmental reading skills, reading programs and materials, problems in dealing with handicapped children, and practicum in reading instruction. Special education majors only.

330 Instructional Programs and Strategies (3) Introduction to principles underlying the development of instructional programs in the schools. Strategies include cognitive and skill learning, and modes of teaching.

*332 Teaching Social Studies in the Elementary School (3) Methods of teaching social studies and geography in the elementary curriculum. Techniques, current research projects, reading materials, audio visual aids, resource persons, and field trips used as tools of learning. The organization, development, and use of resource units are stressed. PREREQ: EDE 200 and 251.

*352 Self and Group Processes in the Classroom (3) Analysis of self processes influencing teacher-student classroom interactions. Role of needs, defenses, motives, emotions, and early learning experiences as they shape the prospective teacher's responses to elementary children. Application of social learning and interpersonal theory. PREREQ: EDE 251.

*401 Creativity in the Classroom (3) Exploration of materials and processes of children's perceptions and behavior, aimed at encouraging the development of their critical and creative potentials. PREREQ: EDE 312.

*406 Classroom Management (3) Detailed investigation of the elementary teacher's role in classroom management. Teacher influence, per-

*Open to early childhood and elementary education majors
**Open to elementary education majors only.
***Open to early childhood majors only.
◆ This course may be taken again for credit.

sonality, and class interaction; class roles and expectation; seating plans; discipline; referral; and the teacher's role in evaluating and identifying potential problems in children. PREREQ: EDE 312.

409 Independent Study (1-3) Special topics or projects initiated by the student that will enable her or him to do extensive and intensive study in an area of elementary education. PREREQ: Permission of department chairperson.

**410 Student Teaching (6) (First half of semester)

**411 Student Teaching (6) (Second half of semester) Two separate student teaching experiences are required: one in grades K–3 and one in grades 4–6. Weekly practicum sessions are required. PREREQ: See "Application and Approval for Student Teaching" earlier in this section.

**412 Work-Study in the Elementary School (6) Limited practicum for preservice teachers who have taken EDE 200, 251, 311, 312, and 406. Students work for a full term in one school district under supervision. Six credits may be granted toward student teaching requirements (EDE 411). PREREQ: Permission of department.

◆ 421 Seminar in Elementary Education (3) An intensive study of some current, major developments in elementary education. Topics announced in advance. PREREQ: Senior standing and permission of instructor.

*◆ 422 Seminar in Reading (3) Intensive study of some current, major developments in reading related to elementary education. Topics announced in advance. PREREQ: Permission of instructor.

*◆ 423 Seminar in Communications Skills (3) Intensive study of some current, major developments in communications skills (language arts) related to elementary education. Topics announced in advance. PREREQ: Permission of instructor.

*458 Language Arts/Reading for the Unique Child (3) An open-ended course to help students understand and plan instructional programs for the linguistically different, the gifted, and those with special needs (mainstreaming). The students will examine various strategies, techniques, management, and viable programs for teaching these children language arts and reading.

*481 Constructing Activity-Oriented Teaching Materials (3) A workshop experience for students interested in exploring the many facets of making activity-oriented learning materials for the elementary school classroom. PREREQ: EDM 300.

489 Teaching Skills to Combat Sexism (3) This course is offered to create awareness in prospective teachers of the extent and consequences of sex role stereotyping at all levels of educational experience. It will develop specific skills, behaviors, and classroom strategies that can eliminate effects of sexism in classrooms and on students. Teaches how to deal effectively with the emotion-laden issue of combating sex-role stereotypes.

◆ 498 Workshop in Elementary Education (3) Offers a wide variety of experiences to help prepare students in providing an environment for optimal growth of children in grades K–6.

Symbol: EDR

010 Developmental Reading and Study Skills (1) A course designed to improve vocabulary and study skills. Major attention is given to vocabulary expansion, textbook reading, test taking, and methods of organizing information.

020 Intermediate Level Reading (1) The intermediate level workshop will emphasize the development and improvement of college-level reading competencies. The course is designed to help the students improve their reading comprehension as well as effective study techniques and strategies. Additionally, vocabulary development, flexible reading rate, and critical reading will be taught in this course.

100 College Reading and Study Skills (3) An individualized course to develop reading and study skills such as comprehension, vocabulary, speed, remembering, concentration, taking notes, mastering a text assignment, and preparing for and taking examinations.

110 Developing Learning Skills (1) A course that reviews and develops specialized learning skills such as concentrating when studying, reading a textbook assignment, taking notes, and preparing for and taking examinations. Students who wish to review their study habits or who have special needs in the area of study skills should enroll in this course.

313 Reading Instruction and Practicum in the Secondary Schools (6) Focus is on the mastery of teaching reading in the middle and secondary schools. Students will study the role of the teacher as well as learn how to sequence both developmental and content area readings.

321 Diagnosis and Remediation of Reading Problems (3) Identifying the nature and causes of reading disabilities; experience in helping a child with reading problems. PREREQ: EDE 311 or permission of instructor. Special education majors and reading minors only.

323 Reading for the Handicapped: Diagnosis and Remediation (3) Reading materials, programs, evaluations, and teaching strategies for the mentally or physically handicapped are examined and discussed. Students develop and utilize reading materials in a classroom situation. PREREQ: Permission of instructor. Special education majors and reading minors only.

420 Reading in the Content Areas (3) Understanding the reading process and the need for reading instruction at the middle and secondary school levels. Specific skill development, reading in the content areas, readability, and evaluation.

*Open to early childhood and elementary education majors

**Open to elementary education majors only.

◆ This course may be taken again for credit.

Department of Counselor, Secondary, and Professional Education

Wallace J. Kahn, *Chairperson*
John L. Hynes, *Assistant Chairperson*

PROFESSORS: Gadaleto, C. Good, Hsu, Kahn, S. Walters

ASSOCIATE PROFESSORS: Holingjak, Parsons, Rahn, Silverman

ASSISTANT PROFESSORS: Bolton, D. Brown, K. Brown, Haggard, Hinson, Hynes, Kurzinsky, Napierkowski, Socoski, Welsh

The Bachelor of Science in Education, which prepares the student for teaching in the secondary schools, may be earned with an academic specialization in biology, chemistry, communication, earth and space science, English, French, general science, German, Latin, mathematics, physics, Russian, Spanish, or social studies (which includes concentrations in anthropology, economics, geography, history, philosophy, political science, psychology, and sociology).

Satisfactory completion of a secondary curriculum also will qualify the student for a Pennsylvania Instructional I Certificate, which is valid for six years of teaching the specified subject in approved secondary schools in Pennsylvania. The student must choose one academic field of specialization.

BACHELOR OF SCIENCE IN EDUCATION

1. General Requirements, see pages 35–39 — 51 semester hours
2. Professional Education Requirements — 30 semester hours
   Secondary Education
   EDF 100, EDM 300 (taken in Department of Instructional Media), EDP 250 and 351, EDS 306, Teaching Skills/Methods (taken in academic department of subject major), EDS 411/412
3. Secondary teaching certification is given in specific subject areas. Therefore, specialization in one of the teaching fields listed below is required for graduation in secondary education. The minimum semester hours required for each field is listed in this catalog under the appropriate academic department. These hours will satisfy the Level I Certification requirements in Pennsylvania.

*The student must have a 2.50 GPA in professional education courses with at least a C (2.00) in the asterisked courses in order to be admitted to EDS 411-412, Student Teaching. (Also see Student Teaching, page 118.)

Secondary Areas of Certification

Biology	French	Physics
Chemistry	General Science	Russian
Communication	German	Social Studies
Earth and Space Science	Latin	Spanish
English	Mathematics	

Students in the secondary education program must confer regularly with their professional studies adviser in the Department of Counselor, Secondary, and Professional Education, as well as with the academic adviser assigned by their respective academic department. The certification of all students whose goal is the Bachelor of Science in Education is the responsibility of the certification officer of the School of Education.

Student Teaching Eligibility

To be eligible for student teaching in secondary education (EDS 411/412), the student must have fulfilled the following requirements:

1. Completed the following five courses with a minimum cumulative GPA of 2.25: EDF 100; EDP 250; ENG 121; MATH above 000; PSY 100.
2. Completed the following six courses with a minimum cumulative GPA of 2.50, with at least a C (2.00) in the courses: EDF 100; EDM 300; EDP 250; EDP 351; EDS 306; and methods or teaching skills course in the area of specialization offered in the appropriate academic department.
3. Completed an approved computer literacy course or an approved computer literacy assessment.
4. Completed the speech and hearing screening test administered by the Speech and Hearing Clinic at 201 Carter Drive.
5. Passed a reading test administered by the Department of Childhood Studies and Reading.
6. Completed any test and/or other requirements set by the appropriate academic department.
7. Completed a minimum of 96 semester hours with a Grade Point Average of at least 2.50, including a minimum grade of C in all education courses.

COURSE DESCRIPTIONS

COUNSELOR EDUCATION

Symbol: EDC

462 **Essentials of the Helping Relationship (3)** This course surveys the concepts and skills involved in helping others through individual interviewing, problem solving, decision making, and systematic behavior change.

◆ 498 **Counselor Education Workshop (3)**

499 **Peer Helper Workshop (1-3)** A workshop that focuses on acquisition of specific knowledge and skills necessary for working in a college setting.

FOUNDATIONS

Symbol: EDF

100 **School and Society (3)** An introduction to the nature, function, scope, organization, administration, and support of the public school in American society. Offered every semester.

350 **The Professional and Student Personnel Services (3)** An introduction to nonadjunctive services in education. PREREQ: EDP 250.

360 **The Learner in Nonschool Settings (3)** Emphasis in the course will be placed upon intra- and interpersonal development, facilitative growth and adjustment, and dysfunction as they may impact the nonschool educator or trainer.

364 **Systems-Based Educational Services (3)** This course introduces the student to general systems (social) theory, focusing on the elements, dynamics, and operations of a system that must be considered in developing educational activities and programs for that system. The student will learn strategies of systems analysis and intervention through the investigation of such topics as needs assessment, objective-based programming, organizational development, and program evaluation.

412 **Internship in Nonschool Settings (3)** The internship experience is designed for upper-level education students who are interested in using and transferring existing discipline and pedagogical skills in nonschool settings. A regularly scheduled practicum will be held for all internships.

498 **Workshop in Educational Foundations (3)**

EDUCATIONAL PSYCHOLOGY

Symbol: EDP

249 **Adolescent Development (3)** This course focuses on the emotional, social, intellectual, moral, physical, and self-concept factors shaping human behavior with emphasis on adolescent behavior. Offered in fall and spring semesters.

250 **Educational Psychology (3)** A study of learning in relation to the physical, social, emotional, and intellectual aspects of personality. Offered every semester.

351 **Evaluation and Measurement (3)** A survey of testing materials and procedures with emphasis on interpretation and application of results for pupil guidance purposes. PREREQ: EDP 250. Offered every semester.

467 **Group Dynamics (3)** A group process course designed to help students develop their personal effectiveness in group situations.

SECONDARY EDUCATION

Symbol: EDS

306 **Principles of Teaching and Field Experience in Secondary Education (3)** Methods and strategies of teaching in secondary schools will be the core of the course. Implications of classroom management, learning, and other related problems will be discussed. Students will observe in a classroom for nine weeks. PREREQ: EDF 100. Offered in fall and spring semesters.

410 **Independent Study (1-3)** Special topics or projects initiated by the students that will enable them to do extensive and intensive study in an area of secondary education. PREREQ: Permission of department chairperson.

411-412 **Student Teaching (6) (6)** Observation and participation in teaching and all other activities related to the teacher's work in the area of the student's specialization. PREREQ: 96 semester hours including all professional education courses. Students must have at least a 2.50 cumulative average and at least a grade of C (2.00) in all secondary education and professional education courses. Offered in fall and spring semesters.

SECONDARY EDUCATION/SPECIAL EDUCATION

Symbol: EDX

306 **Principles of Teaching and Field Experience in Special Education (3)** Methods and strategies of teaching in public education. Implications of classroom management, learning, and other related problems will be discussed. Students will observe in a classroom for nine weeks.

◆ This course may be taken again for credit.

Environmental Education Program

John Holingjak, *Coordinator*

Certification Program

This interdisciplinary program enables teacher-education majors to secure certification to teach environmental education. The course sequences in the program are drawn from existing curricula in the natural sciences, social and behavioral sciences, and health and physical education, and permit students to graduate with dual certification. That is, their teaching certificates will be valid for environmental education as well as for their major area of study. For the additional certification in environmental education, students are required to complete four core courses and two elective courses chosen from one of the following areas of concentration: natural sciences, recreation centered, human centered, or curriculum centered. Students wishing to explore this program should consult with the coordinator of environmental education.

CERTIFICATION PROGRAM

1. Required Core Courses — 12 semester hours
   BIO 172* and 201*; EDO 420; and GEO 230
2. Electives—two courses from one of these areas: — 6-8 semester hours
   Group A—Natural Sciences
   BIO 275, 277, 377, and 378; ESS 101, 111, 201, and 230
   Group B—Human Centered
   ANT 102, 310, and 346; GEO 210, 212, 214, and 232; SOC 200 and 342
   Group C—Recreation Centered
   PED 250, 367, 370, and 467
   Group D—Curriculum Centered
   EDO 405, 410, 411, 415, and 425

*Biology majors must substitute biology courses from Group A with the approval of their advisers.

COURSE DESCRIPTIONS
ENVIRONMENTAL EDUCATION

Symbol: EDO

405 Conservation Education Curriculum (K-12) (3) Conservation education as it exists in the present school curriculum and ways to integrate conservation into elementary and secondary school disciplines. Characteristics, interrelationships, and uses of our natural resources; problems and policies of industrial management in conservation as they are related to the school curriculum.

410 Methods in Conservation Education (3) Basic concepts and practices of conservation and outdoor education and their role in the school program.

411 Environmental Education Workshop (3) Each year the workshop is conducted at different geographic locations, such as Alaska and Colorado. A field-centered learning experience, the workshop includes camping trips, studies of flora and fauna, and field investigations. There is interaction with various governmental agencies as well as informal investigations of environmental problems.

415 History of Conservation (3) Development of the conservation movement in the U.S. with emphasis on the progressive adaptation of conservation to our changing social and economic order.

420 Organization and Administration of Outdoor Education (3) Basic concepts of outdoor education, the role of outdoor education in the school program, and the initiation and administration of outdoor education.

425 Independent Studies in Environmental Education (3) Special research projects, reports, and readings in conservation and outdoor education. Open to seniors only. PREREQ: Permission of instructor.

498 Workshop in Environmental Education (3)

Department of Instructional Media

Joseph M. Spiecker, *Chairperson*

PROFESSOR: Spiecker

ASSOCIATE PROFESSOR: Redmond

ASSISTANT PROFESSORS: Reis, Rumfield

APPLIED MEDIA TECHNOLOGY PROGRAM IN INSTRUCTIONAL MEDIA

The Applied Media Technology Program, which results in an Associate of Science degree, is a two-year program consisting of an interrelated series of courses in computers, photography, filmmaking, television, multi-image, sound recording, design, and graphic production of visual materials.

The student will develop a specific roster of skills that is employable in almost every segment of our society, including education, business, government, medicine, law enforcement, and industry.

Students must meet general academic requirements of the University for admission and must satisfactorily complete 64 credit hours of required and elective courses.

ASSOCIATE OF SCIENCE — APPLIED MEDIA TECHNOLOGY

1. General Requirements — 18 semester hours
   COM 101; CSC 101, or 115, or 141; ENG 120; MAT 103; PSY 100 or 265, and a course in fine arts
2. Required Courses — 40 semester hours
   EDM 202, 213, 223, 225, 226, 228, 230, 231, 233, 234, 275, and 290
3. Electives — 9 semester hours

Minor in Instructional Media — 18 semester hours

Current trends have increased the need for trained personnel in the field of instructional technology. Students who are trained in this field have several career options, in industry, with either the training and development center or the public relations department, and in education, with the instructional media department.

Students in the instructional media program will be required to develop a broad range of skills and knowledge in the use of media and technology. Associate students pursuing a B.A. in liberal studies may satisfy requirements with a minor or associate's degree in instructional media along with other requirements.

Students selecting a minor in instructional media must complete the following 18 credit hours of required courses: 402, 423, 425, 430, 433, and 475. Interviews will be conducted on request.

COURSE DESCRIPTIONS
INSTRUCTIONAL MEDIA

Symbol: EDM

200-level courses for associate degree students only.

202 Selection and Effective Utilization of Media (3) This course uses a systems approach in the design of training packages, emphasizing the criteria for the selection of media that will effectively fulfill training objectives. It also will involve the most effective ways to utilize the media selection. For associate degree students.

203 Mediated Programs (3) This course will explore the area of visual communication materials. Through the use of research materials, demonstrations, and various production techniques, the student will be able to design and produce visual instructional materials. The materials produced will be relevant to either the group or individualized instructional process reflected in current trends and methods of curriculum design.

213 Production of Multi-Image Programs (3) The multi-image presentation, perhaps more than any other means of communication, offers endless possibilities for creative expression. This course will attempt to acquaint the student with the "how" and "why" of multi-image presentations. The student, through hands-on experience, will research, design, and produce several programs that use multi-image techniques. For associate degree students. PREREQ: Basic photography.

223 Design and Production of Visual Materials (3) This course will explore the areas of design as they relate to the production of visual instructional materials to be utilized as an integral part of the curriculum. Discussion of, and hands-on experience with, the phases of perception, communication, and learning theories for determining advantages, limitations, and the use of various visual media. For associate degree students.

225 Basic Photography (3) A course dealing with the photographic process. The course will cover camera handling, film and print processing, and application of photography to media production and the development of training packages. For associate degree students. Student must supply adjustable 35mm camera plus developing and printing materials.

226 Intermediate Photography (3) A course for those who have had a basic photography class or previous photographic experience. The course will stress technical and creative approaches to black-and-white and color photography with small format cameras and will involve advanced techniques of exposure, lighting composition, macro photography, and film and print processing. For associate degree students. Student must supply adjustable 35mm camera plus developing and printing materials. PREREQ: Basic photography.

228 Advanced Photography (3) Course designed for students interested in learning professional techniques of black-and-white and color photography. General areas considered will be large and medium format cameras. Specific consideration will be given to camera equipment, lenses, filters, retouching, available light and electronic flash photography, composition, and advanced darkroom techniques. For associate degree students. PREREQ: Basic and intermediate photography.

230 Motion Picture Production I (3) A workshop in scripting and shooting of 16mm films. For associate degree students.

231 Motion Picture Production II (3) Particular attention is paid to 16mm/video equipment, editing, sound recording, laboratory and processing procedure, color, and television application. For associate degree students.

233 Basic TV Production I (3) This course deals with the history and development of commercial and instructional television in the United States. It will include a study of closed circuit systems and the equipment and practices to operate such a system. The student will gain experience in planning and producing instructional or promotional television programs. For associate degree students.

234 TV Production II (3) A television studio production course emphasizing the practical work of all aspects of closed circuit television. It will include the presentation of scripts, graphics, animation, photos, film, slides, sound recordings, lighting, staging, and electronic technical information. For associate degree students.

235 Instructional TV Production III (3) A course designed for the advanced undergraduate student in television production. The 10-minute television productions are basic requirements of the course. The student will use the television production facilities of West Chester University to complete the basic TV production requirements. For associate degree students.

275 Sound Reproduction in Instructional Communication (3) A combination theory and workshop course that will teach the theory of sound and its application in instruction. For associate degree students.

290 Internship (4-15) Internship/Field Experience will give students an opportunity to gain practical experience in the field of media technology at their level. Areas where students might be placed are schools, two- and four-year colleges, industry, TV stations, photo labs, etc.

300 Introduction to Instructional Communications (3) Techniques, materials, and equipment, and the development of skills needed for teaching.

402 Selection and Effective Utilization of Instructional Media (3) This course will engage the student in a systems approach to course development, emphasizing the criteria used in the selection of media appropriate to the effective fulfillment of course objectives. It also will involve the most effective ways to utilize the media selected.

403 Developing Mediated Individualized Instructional Programs (3) Involves the development by students of individualized instructional packages utilizing various forms of media. The packages will be developed using a systems approach and emphasis will be on interactive video and computer-assisted instruction.

405 Theory of Motion Picture Production (3) Lecture integrated with extensive use of films to teach the basic functions of the educational film and attempt to cite results to demonstrate the effective use of films.

413 Production of Multi-Image Production (3) The multi-image presentation, perhaps more than any other means of communication, offers endless possibilities for creative expression. This course will attempt to acquaint the student with the "how" and "why" of multi-image presentations. The student, through hands-on experiences, will research, design, and produce several programs that use multi-image techniques. PREREQ: Basic photography.

423 Design and Production of Visual Materials (3) This course will explore the areas of design as they relate to the production of visual instructional materials to be utilized as an integral part of the curriculum. The phases of perception, communication, and learning theories are discussed, along with hands-on experience, for determining advantages, limitations, and the use of various media.

425 Basic Photography (3) A course dealing with photographic processing, camera handling, and film and print processing. Students must have a complex camera and must purchase personal supplies.

426 Intermediate Photography (3) A course designed for students who have had the basic photography course and wish to sharpen previously learned skills and acquire more advanced skills in picture taking, film and print processing, and print finishing. PREREQ: Basic photography.

428 Advanced Photography (3) Course designed for students interested in learning professional techniques regarding black-and-white and color photography. General areas considered will be large, medium, and 35mm format cameras. Specific consideration will be camera equipment, lenses, filters, retouching, available light and electronic flash, composition, and advanced darkroom techniques. PREREQ: Basic and intermediate photography.

430 Motion Picture Production I (3) Scripting and shooting of 16mm films and videos including magnetic sound recording and reproduction.

431 Motion Picture Production II (3) Course geared for the advanced filmmaker/video producer interested in learning the professional techniques for producing 16mm/video production.

433 Basic TV Production I (3) This course deals with the history and development of commercial and instructional television in the United States. It will include a study of closed circuit systems and the equipment and practices to operate such systems. The student will gain experience in planning and producing instructional or promotional television programs.

434 Instructional TV Production II (3) A lecture, demonstration, and workshop course that stresses planning, writing, producing, and evaluating instructional television. Emphasis is placed on student involvement in the television production process.

435 Instructional TV Production III (3) This is a course designed for the advanced undergraduate student in television production. It will allow students to produce three, 15-minute television productions on topics of their own choice. The student will assume the role of a TV director and producer and will accept independent responsibility for the TV productions.

463 Field Study of Media Programs (3) A scheduled group or individual tour, foreign or domestic, in which students investigate notable installations or projects in educational media.

475 Sound Reproduction in Instructional Communications (3) A combination theory and workshop course that will teach the theory of sound and its application in instruction.

498 Workshop in Instructional Media (3 or 6)

Social Studies Program

David S. Eldredge and John J. Turner, *Coordinators*

BACHELOR OF SCIENCE IN EDUCATION—
COMPREHENSIVE SOCIAL STUDIES

The Commonwealth of Pennsylvania grants a comprehensive social studies certificate entitling the holder to teach social studies in public school. Preparation combines an introduction to all of the social science disciplines with either a concentration in one discipline, or an interdisciplinary concentration. For information and specific course requirements, contact the chairpersons of the departments participating in this program: Mr. Eldredge, Department of Political Science; or Dr. Turner, Department of History.

COMMON REQUIREMENTS

1. General Requirements, see pages 35–39 — 51 semester hours
2. Professional Education, see page 112 — 30 semester hours
3. Social Science Requirements: ANT 102; ECO 101 or 111 and 112; GEO 101; HIS 101, 102, 151, and 152; PSC 100; PSY 100; SOC 200; plus 6-9 semester hours and a concentration chosen from A, B, C, or D below. NOTE: Some of the requirements in concentrations B, C, and D may be met by courses that fulfill the social science requirements.

A. Concentration in a Social Science Discipline — 21 semester hours
In the discipline of the student's choice: anthropology, geography, history, philosophy, political science, psychology, or sociology. See department of concentration for advising.

B. Concentration in American Culture — 33 semester hours
See Department of History for advising.
American Studies Core — 24 semester hours
American Studies Electives and Social Science Requirements — 9 semester hours

C. Concentration in World Cultures — 30 semester hours
Consult with any of the following departments for advising: Anthropology and Sociology, History, or Political Science.
Seminar — 3 semester hours
European Tradition — 9 semester hours
Non-European Tradition — 9 semester hours
Topical and Thematic Approaches — 9 semester hours

D. Concentration in Ethnic Studies — 30 semester hours
See the Department of History for advising.
History Courses — 15 semester hours
Social Science Electives and Requirements — 9 semester hours
Humanities Electives — 6 semester hours

A 2.50 cumulative average in the social sciences and a 2.50 overall average is a prerequisite for student teaching.

COURSE DESCRIPTIONS

COMPREHENSIVE SOCIAL STUDIES

SSC 331 Teaching Social Studies in Secondary Schools (3) Methods and materials of teaching social studies for prospective secondary school teachers. Emphasis is on combining educational theory with social studies content for effective teaching. Exercises and practical application. Normally taken the semester immediately prior to EDS 411/412.

Department of Special Education

Judith S. Finkel, *Chairperson*

ASSOCIATE PROFESSORS: Finkel, Nickles, Zlotowski

ASSISTANT PROFESSOR: LaCoste

Degree Program To Teach the Mentally and/or Physically Handicapped

The objective of the program in special education is to provide relevant and comprehensive training for those seeking certification in the teaching of students in need of learning support, emotional support, physical support, life skills support, autistic support, and multidisabilities support.

The special education curriculum is designed to produce a teacher who has a foundation in normal growth, development, and educational practices. During the course of study, the college student will work with students whose levels of disabilities range from mild to profound. Personal characteristics essential for adequate preparation and performance include sensitivity, flexibility, open-mindedness, intellectual ability, physical stamina, and a level of expectation that is professional and realistic.

BACHELOR OF SCIENCE IN EDUCATION — SPECIAL EDUCATION

1. General Requirements, see pages 35–39 — 51 semester hours
Introduction to Psychology is required.
Electives selected under advisement
(See department handbook.)
2. Professional Education — 24 semester hours
Required: EDF 100, EDM 300, EDP 250 and 351, and student teaching
*3. Special Education — 30 semester hours
Required: EDA 101, 102, 200, 220, 301, 302, 349, 350, 360, and 403
*4. Required Supporting Courses — 18 semester hours
EDE 315, EDR 323, HEA 206, MAT 357, PED 252, and SPP 340

Minor in Developmental Disabilities — 18 semester hours

Current trends, enforced by recent litigation, have increased the need for a general understanding of the individuals with disabilities in our culture.

The program is designed to introduce students to individuals with disabilities through course work and field practicums. A life programming approach is used.

1. Developmental Disabilities — 15 semester hours
Required: EDA 100, 200, 220, 349, and 350
2. Free Elective — 3 semester hours
Selected with approval of special education adviser

This minor may be taken as a concentration by students in the Associate of Arts in liberal studies program or as one of the minors in the Bachelor of Arts or Bachelor of Science in liberal studies general degree program. The minor does not lead to Level II teacher certification.

*Minimum grade of C– required in these courses.

COURSE DESCRIPTIONS
SPECIAL EDUCATION

Symbol: EDA

100 Mainstreaming for Exceptional Students (1) This course is designed to acquaint the classroom teacher with exceptional students who may be spending some portion of the day in the regular setting. Current regulations covering those placements will be reviewed. Emphasis will be placed on adequately meeting special educational needs.

101 Psychology of Mental and Emotional Disabilities (3) An introduction to the range of exceptional children from a historical perspective with an in-depth study of mental retardation and emotional disturbance. PREREQ: PSY 100.

102 Psychology of Physical and Learning Disabilities (3) An in-depth study of the physically handicapped and the learning disabled/brain damaged with an overview of psychological and societal implications and multiple-handicapped conditions. PREREQ: PSY 100.

200 Practicum (3) Field experience in an integrated educational environment, consisting of collaborative training with regular and special educators.

220 Behavior Management (3) An exploration of current practices in management of behavior with emphasis on teacher-delivered systems. PREREQ: EDA 101 or 102. Offered fall semester only.

241 Psychology of Exceptional Children (3) Psychology of children who are either mentally gifted or retarded, or who have vision, hearing, speech, or orthopedic handicaps, or emotional or social problems. PREREQ: PSY 100.

245 Introduction to Learning Disabilities (3) Identification, education, and treatment of the child labeled as "learning disabled." Emphasis given to the specific learning and emotional needs such a child presents. An overview of the historical development and current status of this field is included.

280 Integrating the Arts (3) Fine art, music, puppetry, and dance are combined as creative processes to be adapted for use with children.

301 Field Experience and Seminar: Mentally Handicapped (3) A weekly, three-hour practicum and one and one half-hour seminar devoted to field experience with mentally handicapped students. Class analysis of observed needs and methods of teacher responses. PREREQ: EDA 101.

302 Field Experience and Seminar: Physically Handicapped (3) A weekly, three-hour practicum and one and one-half hour hour seminar devoted to field experience with physically handicapped students. Class analysis of observed needs and adjustment factors. PREREQ: EDA 102.

349 Programmed Environments (3) An overview of curriculum preparation including the study of methods, materials, equipment, and areas uniquely designed to meet the needs of handicapped learners.

350 Life Curriculum and Methods (3) Preparation to assist handicapped students achieve adaptive levels of behavior through the view of total life preparation. PREREQ: EDA 349.

360 Assessment and Instructional Strategies (3) An introduction to diagnostic procedures and the conversion of these findings into relevant educational plans and instructional strategies. PREREQ: EDA 350.

403 Senior Seminar: Current Trends (3) Exploration of emerging concepts, problems, and trends in a seminar format with emphasis on individual preparation. PREREQ: EDA 360.

◆ 410 Independent Study (1-3) Special topics or projects initiated by the student that will enable her or him to do extensive and intensive study in an area of special education. PREREQ: Permission of chairperson.

416 Student Teaching and Direction of Activities, Including Practicum: Emotionally Disturbed (6) Participation in teaching and all other activities in the student teaching role related to the teacher's work. PREREQ: 96 semester hours including all professional education courses and all specialized preparation courses with standards as shown above (*).

417 Student Teaching and Direction of Activities, Including Practicum: Learning Disabled (6) See EDA 416 for description and requirements.

418 Student Teaching and Direction of Activities, Including Practicum: Mentally Retarded (6) See EDA 416 for description and requirements.

419 Student Teaching and Direction of Activities, Including Practicum: Physically Handicapped (6) See EDA 416 for description and requirements.

443 Psychology of the Mentally Retarded (3) Etiology, diagnosis, and various treatment approaches to the mentally retarded. PREREQ: EDA 241.

◆ This course may be taken again for credit.

Teaching Certification Programs

West Chester University offers 20 undergraduate certification programs and two endorsement areas for students who wish to prepare themselves to be certified teachers. These programs, which are described more fully in the departmental listings, include:

Department	Program and Degree
Anthropology-Sociology	BSED: Social Studies–Anthropology Social Studies–Sociology
Biology	BSED: Biology
Chemistry	BSED: Chemistry
Childhood Studies and Reading	BSED: Elementary Education Early Childhood Education
Communication Studies	BSED: Communication
Counselor, Secondary, and Professional Education	Endorsement Certification: Environmental Education
English	BSED: English
Foreign Languages	BSED: French German Latin Russian Spanish
Geology and Astronomy	BS: Earth-Space Science
Geography and Planning	BSED: Social Studies–Geography
Health	BS: Health Education BS: Dental Hygiene
History	BSED: Social Studies–History American Cultures Ethnic Studies Human Heritages World Cultures
Mathematics and Computer Science	BSED: Mathematics
Music Education	BS: Music Education: Vocal, Choral, General, Instrumental
Philosophy	BSED: Social Studies–Philosophy
Physical Education	BS: Health and Physical Education Endorsement Certification: Driver Education
Physics	BSED: Physics
Political Science	BSED: Social Studies–Political Science
Psychology	BSED: Social Studies–Psychology
Special Education	BSED: Special Education

ADMISSION TO TEACHER EDUCATION

All candidates for teacher certification must meet the teacher education requirements as well as satisfy the requirements of their respective departments. The following teacher education requirements must be satisfied prior to admission to the professional program in teacher education.

1. Maintain a cumulative GPA of 2.50
2. Maintain an overall GPA of 2.25 for the following required courses: EDF 100, EDP 250, ENG 120 (if required), ENG 121, three credits of MAT 103 (or course required by major department), PSY 100

3. Demonstrate writing competency by successfully completing ENG 121
4. Completion of a speech screening test and hearing screening test
5. Successfully pass a reading screening test
6. Demonstrate computer literacy competencies by:
   a. Successfully completing a computer literacy course (may be part of general education science distribution requirement)
   or
   b. Passing a computer literacy test.
7. Provide evidence of 30 clock hours of field experience by maintaining a portfolio on file in the student's major department. Such evidence must meet the standards of the specific certification program.

Under the procedure, students are classified in one of three categories:

1. Pre-teacher education status,
2. Conditional teacher education status, or
3. Full teacher education status

Pre-Teacher Eduation Status. Students are placed in this category until they have taken 45-63 credits of course work.

Conditional Teacher Education Status. Students are assigned to this status if they are deficient in one or more requirements. Students must meet these teacher education requirements and the requirements of their respective department(s) with the approval of the Teacher Education Office of Field Experience.

Full Teacher Education Status. Students are assigned to this status when they have met the teacher education requirements and the requirements of their respective departments. They will be formally admitted to teacher education in the fall of their junior or senior year and approved for student teaching by their respective department(s) with the approval of the Teacher Education Office of Field Experience.

Students should consult with their professional adviser/s upon matriculation at the University.

STUDENT TEACHING

Student teaching is to be taken in the seventh or eighth semester and normally culminates the professional experience in preservice preparation for teaching. Students are required to file applications for student teaching with their individual departments. Since each department's regulations differ, students are urged to check with departments so the proper procedure may be followed.

Students must do their teaching in area schools where the University holds a contract for student teachers.

To be eligible for student teaching, candidates must have senior standing (96 semester hours) with a cumulative index of 2.50 or higher, show that all required course work in at least the first six semesters has been completed, and have satisfied the requirements for full admission to teacher education. Criteria for student teaching approval occasionally change. Students should contact departments for requirements. A student must earn grades of C or better to qualify for the certificate. Students receiving a grade of C- or lower will not be recommended for certification.

TEACHING CERTIFICATES

It is the student's responsibility to apply for a Pennsylvania Certificate through the University's Certification Office. It is recommended that students apply as soon as requirements have been met.

Applicants for certification must meet the requirements in effect at the time of application.

Applicants for the certificate generally must be citizens of the United States. A noncitizen must have declared the intent to become a citizen of the United States. For more information, contact the University's Certification Office.

Application forms and information about certification are available from the Certification Office in the School of Education.

Postbaccalaureate students who wish to obtain teaching certification should consult with the School of Education.

NATIONAL TEACHER EXAMINATION

Applicants for an initial Pennsylvania Instructional Level I Certificate must pass the National Teachers Examination in communication skills, including listening, writing, and reading; general knowledge, including social sciences, literature and fine arts, math, and science; professional knowledge; and a major subject specialization area. The professional knowledge and major specialization area tests should be taken near the end of the senior year after all requirements have been completed. West Chester University has been designated as a test center. Tests will be administered three times a year.

INSTRUCTIONAL I CERTIFICATE

A student who completes one of the University's teacher education curricula receives his or her degree from the University and may qualify for an Instructional I Certificate, which is issued by the Pennsylvania Department of Education. This certificate is valid for six years of teaching in Pennsylvania. Recommendation for the certificate is made by the certifying officer of the University.

INSTRUCTIONAL II CERTIFICATE

This certificate requires three years of successful teaching in Pennsylvania under the Instructional I Certificate, successful completion of an Induction Plan approved by the Pennsylvania Department of Education, and the satisfactory completion of 24 semester hours of additional work completed at a baccalaureate granting institution, after issuance of the baccalaureate degree. This certificate is a permanent license to teach in Pennsylvania.

All or part of the educational requirements for this credential may be obtained through approved, in-service programs.

Certification in additional subject areas may be obtained by completing requirements for that area. Students should consult the department in which they seek certification for information and an evaluation of their credits.

School of Health Sciences

Roger W. Mustalish, *Interim Dean*

Department of Communicative Disorders

John L. Eberhart, *Chairperson*

PROFESSOR: Weiss

ASSOCIATE PROFESSORS: Koenig, Maxwell, Stigora, Stratton

ASSISTANT PROFESSORS: Eberhart, Stuart

The Department of Communicative Disorders offers two programs leading to the bachelor's degree.

1. The B.A. in COMMUNICATIVE DISORDERS is a preprofessional program that provides students with basic knowledge of human communication and communication disorders in preparation for graduate study in audiology, speech-language pathology, speech and hearing science, or related health science or communication fields.
2. The B.S. in EDUCATION in SPEECH CORRECTION provides students with basic knowledge of human communication and communication disorders that qualifies them for the Pennsylvania Instructional I Certificate and prepares them for graduate study.

The B.S.Ed. program has been suspended. The teacher certification may be moved to the graduate level.
Both degree programs provide the student with the opportunity to complete much of the undergraduate preparation that is applicable to fulfilling the requirements for the Certificate of Clinical Competence (CCC) from the American Speech-Language-Hearing Association (ASHA).

The department operates a Speech and Hearing Clinic that serves as a teaching and training facility for the academic program. The clinic provides diagnostic and therapeutic services for children and adults with speech and hearing problems. These services are available to individuals from the University as well as from the surrounding communities.

Academic Policies

1. Grades of "D" or "F" earned in major (SPP) courses must be raised to "C" or better. A failed major course must be repeated the next time the course is offered.
2. A minimum 2.50 cumulative GPA and 2.50 major average is required for all communicative disorders majors in order to complete the degree programs.

BACHELOR OF ARTS — COMMUNICATIVE DISORDERS

1. General Requirements, see pages 35–39	51 semester hours
2. Foreign Language and Culture	9-15 semester hours
3. Related Areas These courses are to be selected under advisement from a department-approved list.	24 semester hours
4. Communicative Disorders Concentration SPP 101, 106, 163, 166, 203, 204, 206, 263, 323, 333, 346, 350, 363, 366, 451, and 463	33 semester hours
5. Electives	6-21 semester hours

BACHELOR OF SCIENCE IN EDUCATION — SPEECH CORRECTION

Each student must complete the following requirements:

1. General Requirements, see pages 35–39	51 semester hours
2. Cognate Courses and Electives These courses are to be selected under advisement from a department-approved list.	6 semester hours
3. Professional Education EDA 241, EDF 100, EDP 250, PSY 325 and 375, SPP 411-412 and 470	30 semester hours
4. Specialized Preparation PHY 110, SPP 101, 106, 107, 203, 223, 236, 323, 343, 346, 350, 351, 352, and 471	42 semester hours
5. Teacher Education Requirements	

COURSE DESCRIPTIONS
COMMUNICATIVE DISORDERS

Symbol: SPP

101 Introduction to Communicative Disorders (3) An introductory survey of normal processes and disorders of speech, language, and hearing. Suitable for nonmajors.

106 Anatomy of Speech and Hearing Mechanisms (3) A study of embryology, normal development, neurology, and physiology of anatomical structures of the speech and hearing mechanisms. PREREQ: SPP 101.

163 Seminar I in Communicative Disorders (.5) The seminar is designed to help integrate experiential and theoretical information. The seminar will focus on career/professional awareness, orientation to the department, and individual studies.

166 Seminar II in Communicative Disorders (.5) The seminar is designed to help integrate experiential and theoretical information. The seminar will focus on personal adjustment, assertiveness, and active listening.

203 Speech and Hearing Science (3) This course presents students with the fundamental knowledge of acoustics related to speech production and speech perception. It also provides an opportunity for students to engage in laboratory experiences related to acoustic and psychoacoustic measurement.

204 Speech and Language Development (3) Examination of normal communication development: biological, cognitive, social and ecological bases of language. Developmental milestones from prelinguistic communication to oral language and literacy. Normal variations in development associated with cultural diversity and bilingualism. PREREQ: SPP 101, ENG/LIN 230.

206 Articulation Disorders and Clinical Phonology (3) The symptomatology, etiology, assessment, and remediation of articulatory and phonological disorders. Includes study of standard and variant sounds of the English language, and development of skills in their recognition, production, and transcription. PREREQ: SPP 101, 106, 203, 204; ENG/LIN 230.

263 Seminar III in Communicative Disorders (.5) The seminar is designed to help integrate experiential and theoretical information. The seminar will focus on implications of disabilities and on cultural diversity.

323 Fluency and Voice Disorders (3) The symptomatology, etiology, diagnosis, and treatment of communicative disorders associated with fluency and voice.

333 Language Disorders (3) Clinical management issues associated with developmental and acquired language disorders in children and adults. Linguistic patterns observed in the performance of individuals with various etiological conditions (e.g., mental retardation, autism, hearing loss, neurological impairment, craniofacial anomalies, learning disability). Factors indicating risk for and maintenance of language disorders. Protocols for evaluation and treatment indicated by developmental theories, processing models, and sensitivity to normal variations among culturally diverse populations. PREREQ: SPP 204.

340 Developmental and Disorders of Language (3) An examination of normal language develop-

ment and its psycholinguistic, neurological, and social dimensions. Special education considerations for children with language disorders. PREREQ: EDA 101 or 102 is required; SPP 101 is recommended.

346 **Hearing Disorders** (3) An introduction to audiology and its relationship to other medical and educational fields concerned with hearing impairments. Developmental, medical, social, physical, and psychological properties of hearing and sound are explored. Evaluative techniques are introduced with opportunity for limited practical experience. PREREQ: SPP 106 and 203.

350 **Clinical Principles in Communicative Disorders** (3) A study of evaluative and therapeutic materials and methods applicable to the professional setting. PREREQ: SPP 206, 323, and 333.

363 **Seminar IV in Communicative Disorders** (.5) The seminar is designed to help integrate experiential and theoretical information, focusing on principles and applications of counseling.

366 **Seminar V in Communicative Disorders** (.5) The seminar is designed to help integrate experiential and theoretical information, focusing on professional resources and the legal, ethical, and political responsibilities of the professional.

◆ 410 **Independent Study** (1-3) Research, creative projects, reports, and readings in speech pathology and audiology. Application must be made to advisers by students one semester in advance of registration. Open to juniors and seniors only. PREREQ: Approval of department chairperson. Offered on demand.

451 **Clinical Practicum in Communicative Disorders** (3) Supervised practice in the Speech and Hearing Clinic. Designed to prepare students to evaluate and provide therapy for children and adults who have communication problems. Must be repeated if performance is not satisfactory. PREREQ: Permission of instructor and 2.50 average in major SPP courses.

463 **Seminar VI in Communicative Disorders** (.5) The seminar is designed to help integrate experiential and theoretical information, focusing on employment opportunities and graduate education.

469 **Clinical Instrumentation** (3) Evaluation, selection, use, and maintenance of electronic aids for the speech and hearing clinician. Emphasis on demonstrations and practical experience. Open to speech pathology and audiology students with senior standing. Also offered as SPP 569 for graduate credit.

◆ 498 **Workshop in Communicative Disorders** (3)

◆ This course may be taken again for credit.

Department of Health

Sheila M. Patterson, *Chairperson*

Robert P. Nye, *Assistant Chairperson*

PROFESSORS: Lemcke, Mustalish, Nye, Sheehan, Young

ASSOCIATE PROFESSORS: Cinelli, Fisher, Goetz, Harris

ASSISTANT PROFESSORS: Boyle, Brey, Carson, Patterson, Sankaran, Shorten

ADJUNCT PROFESSORS: Albright, Evans, Fellows, Furio, LeRoy, Robbins, Therkauf, Wix

The Department of Health offers three programs leading to a Bachelor of Science degree and also offers an Associate of Science degree in respiratory care.

1. The B.S. in HEALTH EDUCATION prepares an individual to teach in grades K through 12. Upon completion of 129 credits, the students take the mandated examination to certify teachers in Pennsylvania. Students passing the exam will receive an Instructional Level I Certificate to teach health education.
2. The B.S. in PUBLIC HEALTH is designed to provide students with the competencies needed for a career in public health. Students selecting this program will take a public health core of courses and select one of the concentrations from the following:
   a. PUBLIC HEALTH—HEALTH PROMOTION. Prepares students for a career as a public health practitioner in hospitals, health departments, health agencies, and industry. The program provides a comprehensive basic science background as well as a strong public health foundation. This is an accredited program by SOPHE/AAHE.
   b. PUBLIC HEALTH—ENVIRONMENTAL HEALTH. Prepares students for careers as environmental health scientists in industry, consulting firms, government, and academia. The program synthesizes a rigorous general scientific preparation with specialized applied courses in a wide range of environmental health science disciplines, such as industrial hygiene, hazardous waste management, and water quality.
   c. PUBLIC HEALTH—NUTRITION. Prepares students for careers in nutrition, working in schools, industry, and hospitals.
3. The B.S. in HEALTH SCIENCE is for students who have completed a certificate or associate's degree program in such health science areas as dental hygiene, respiratory therapy, occupational therapy, medical technology, and cardiovascular technology. The program gives professionals the chance to build on their technical education already received and to develop academic competency in a related field. A school dental hygiene certification concentration of 18 credits is offered under this degree.
4. The A.S. in RESPIRATORY CARE is offered in association with Bryn Mawr Hospital. Graduation from the program satisfies the entrance requirement for the Written Registry Examination and the Clinical Simulation Examination given by the National Board for Respiratory Care. Successful completion of these examinations qualifies the candidate as a registered respiratory therapist. Most respiratory therapists are employed by hospitals and home health care agencies.

Academic Policies

1. Repeating Courses
   Department of Health majors who earn less than a C (2.00) in selected program requirements may be required to repeat such courses. Students should discuss these requirements with their advisers.
2. Overall GPAs for student teaching, internships, and field experiences
   A. A minimum 2.50 cumulative GPA is required of all school health education majors for student teaching assignments.
   B. A minimum 2.30 cumulative GPA is required of all public health (health promotion, environmental health, and nutrition) majors for internships or field experience assignments.
   For students not meeting these requirements, supplementary course work will be advised.

REQUIREMENTS COMMON TO THE B.S. PROGRAMS

General Education Requirements, see pages 35–39. — 51 semester hours

BACHELOR OF SCIENCE — HEALTH EDUCATION

1. Health Education Core — 52 semester hours
   HEA 100, 103, 204, 206, 242, 303, 304, 306, 308, 330, 341, 342, 404, 405, 410, and 440
2. Professional Education Requirements — 18 semester hours
   EDA 100, EDE 406, EDF 100, EDM 300, and EDP 250 and 351
3. Cognate Requirements — 11 semester hours
   BIO 100*, 259, and 269; CHE 100, COM 101, CSC 101*, MAT 103, PHI 180*, PSY 100*, and SOC 200*

BACHELOR OF SCIENCE — PUBLIC HEALTH

1. Required of ALL public health students — 27 semester hours
   BIO 110* and 204, CHE 103* and 104*, CRL 103* and 104*, CSC 101, HEA 341, and MAT 121

*These required courses also satisfy general education requirements.

2. All public health students are required to complete one of three concentrations:

A. Public Health — Health Promotion
   1. Required: ENV 350, HEA 100, 103, 204, 241, 242, 303, 306, 330, 342, 402, 410, 420, and 421 — 39 semester hours
   2. Cognate Requirements: BIO 259 and 269, COM 101, SOC 200, and SWO 200 — 11 semester hours
   3. Electives: Selected under advisement — 4 semester hours

B. Public Health — Environmental Health
   1. Required: ENV 350, 451, 455, 456 — 21 semester hours
   2. Elective Environment Health Track — 14 semester hours
      Select from one of the following:
      a. Environmental Quality/Public Sector
         ENV 360, 435, 450, 461, 462, and 463
      b. Environmental Quality/Occupational Sector
         ENV 435, 452, 453, 459, and 460
      c. General: Any combination of the above courses taken under advisement
   3. Cognate Requirements — 28-29 semester hours
      BIO 270, CHE 231-232, CRL 232, ESL 101, ESS 101, MAT 161, and PHY 130-140

C. Public Health—Nutrition
   1. Required: HEA 241, 242, 303, 306, 311, 341, 342, 411, 412, 413, 414, 420, and 421 — 48 semester hours
   2. Cognate Requirements: — 49 semester hours
      BIO 110, 204, 259, and 269; CHE 103, 104, 230, and 310; CSC 101; ECO 101; MAT 121; MGT 300; PSY 100*; and SOC 200*
   3. Other courses selected under advisement to meet a total of 130 semester hours

BACHELOR OF SCIENCE—HEALTH SCIENCE

1. Satisfactory completion of an allied health certificate, diploma, or A.S. degree program
2. Satisfactory completion of 128 semester hours, including
   a. 51 semester hours of general education
   b. Complete a minimum of six coordinated courses or 18 semester hours approved by an adviser. Suggested concentrations include community health, advanced respiratory care course work, health management, school dental hygiene certification, or health science course work.

ASSOCIATE OF SCIENCE — RESPIRATORY CARE

1. General Requirements — 19 semester hours
   COM 101, ENG 120, MAT 107, PHI 180, PSY 100, and the arts
2. Respiratory Care Requirements — 44 semester hours
   HEA 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, and 266
3. Cognate Requirements — 15 semester hours
   BIO 204, 259, and 269, and CHE 100
4. Grade Requirements
   a. All HEA courses, "C" or better
   b. All other WCU courses, "C–" or better

Minor in Health Sciences — 18 semester hours

Required course HEA 100 and 15 hours of other health courses selected under advisement. Nine credits must be at the 300 and 400 level. A grade of C– or better is required in each course.

*These required courses also satisfy general education requirements.

COURSE DESCRIPTIONS

ENVIRONMENTAL

Symbol: ENV

#102 **Humans and the Environment** (3) A study of the ability of humans to survive and maintain their life quality considering the limited resources and recycling capacity of planet Earth.

350 **Environmental Health** (3) Methods of promoting health by controlling environmental factors relating to air, water, wastes, housing, radiation, and industrial hygiene. PREREQ: BIO 110 and CHE 104, or permission of instructor.

360 **Air Quality and Health** (4) A consideration of the types and amounts of air contaminants, the atmospheric processes that transport them, and the role of air quality in human health. PREREQ: HEA 350, or permission of instructor.

450 **Hazardous and Solid Wastes** (3) Sources, characteristics, and amounts of solid and hazardous wastes and their implications for human health. Methods of collection, handling, disposal, and recycling. PREREQ: HEA 350, or permission of instructor.

451 **Toxic Substances** (3) An investigation of the health problems caused by toxic substances in the workplace and in the general environment. PREREQ: BIO 204, CHE 231 (concurrent), HEA 350, or permission of instructor.

452 **Industrial Hygiene** (3) A study of the anticipation, recognition, evaluation, and control of health hazards in the work environment. PREREQ: HEA 350, or permission of instructor.

453 **Occupational Safety** (3) A study of the recognition, evaluation, and control of safety hazards in the work environment. PREREQ: HEA 350, or permission of instructor.

455 **Environmental Health Seminar** (3) In-depth investigation and discussions on topics of particular concern or significance to the environmental health field. Topics will be varied from year to year. PREREQ: Senior environmental health major.

456 **Environmental Health Internship** (12) Field placement with an environmental health department in an industry, consulting firm, or government agency. PREREQ: Senior environmental health major.

459 **Industrial Health Engineering** (3) Students will learn various environmental health control strategies and theoretical bases for them. Students also will improve their quantitative skills solving problems concerning the control of environmental health and safety hazards. Cost effectiveness as well as technical effectiveness will be discussed. PREREQ: HEA 350, 452, or permission of instructor.

460 **Industrial Hygiene Techniques** (3) Students will learn evaluation techniques for monitoring the industrial environment in a laboratory setting as well as in the field, such as checking air quality, air flow, noise, heat stress, and radiation. Evaluation of personal protective equipment, and pulmonary function and audiometric testing also will be investigated. PREREQ: HEA 350, 452, or permission of instructor.

461 **Introduction to Watersheds** (3) An introduction to the concept of watersheds and a discussion on how waterborne disease agents are distributed within a drainage basin. Emphasis is placed on methods of assessing pollution of water resources.

462 **Water Quality and Health** (4) An examination of the quality and quantity requirements of surface and subsurface water resources used for drinking water supplies. Laboratory included. PREREQ: HEA 350, or permission of instructor.

463 **Wastewater Systems** (4) An evaluation of the human health implications of liquid wastes: sources, waste characteristics, treatment, and disposal will be considered. Laboratory included. PREREQ: HEA 350, or permission of instructor.

HEALTH

Symbol: HEA

100 **Dimensions of Wellness** (3) Fundamental concepts of health and wellness exploring several health-related areas with an opportunity for personal lifestyle change conducive to better health.

103 **Drugs and Society** (3) Provide knowledge regarding the use and abuse of substances in our society and the impact on the individual, family, and community. Teaching strategies also will be incorporated.

104 **Human Sexuality** (3) Study of sexuality as it relates to self; the interrelationships with people.

105 **Consumer Issues** (3) Study of consumer issues today that relate to the field of health.

106 **Death and Dying** (3) Current controversial issues concerning death and dying. How involved persons cope with death.

109 **Health Issues of Women** (3) The needs and concerns of women as consumers in our present health care system. Various biological, psychological, and social topics will be discussed.

201 **Health Education I** (3) An overview of health topics: wellness, consumer issues, diseases,

Approved interdisciplinary course.

dental care, and community health resources. Teaching strategies and resources will be incorporated.

202 Health Education II (3) An overview of health topics: mental health, aging, and death and dying. Teaching strategies and resources will be incorporated.

204 First Aid for Health Professionals (3) Prepares students entering the professional field of health to meet emergencies requiring first-aid procedures.

206 Human Development (3) A lifespan approach to the study of human development in the physical, cognitive, and psychosocial domains.

211 First-Aid for Children (1) Safety and Cardiopulmonary Resuscitation (CPR) for early childhood or elementary education majors.

241 Introduction to Public Health (3) A study of the components, functions, and interrelationships that are part of any program or organization in public health.

242 Community Health (3) Community health problems and services considered on the local, national, and international levels. Includes practical experience. PREREQ: HEA 241.

249 Respiratory Therapy Equipment (3) Study of the equipment utilized in the delivery of respiratory care.

250 Bronchopulmonary Hygiene (3) An in-depth study of respiratory care modalities utilized in the maintenance of bronchopulmonary hygiene, including humidity and aerosol therapy, sustained maximal inspiration, IPPB therapy, chest physical therapy, and airway maintenance.

251 Oxygen Therapy (2) An overview of basic science relevant to respiratory therapy is followed by the study of the manufacture, storage, and transport of medical gases, regulators, and metering devices, oxygen therapy, and oxygen analysis.

252 Medical Terminology (1) An introduction to medical terminology using a programmed instruction, self-learning technique. Includes chart format, word parts, pulmonary terminology abbreviations, and an overview of respiratory anatomy.

253 Aspects of Respiratory Therapy I (2) A discussion of topics essential to the provision of comprehensive respiratory therapy. Topics include patient care, CPR, and psychosocial issues.

254 Clinical Practice I (2) An introduction to clinical respiratory care consisting of rotations through patient care areas followed by discussion of experiences and correlation to didactic work.

255 Pulmonary Function Evaluation (2) A comprehensive study of various pulmonary function evaluation techniques. Includes bronchoscopy and arterial blood gas analysis.

256 Mechanical Ventilation (3) A comprehensive study of mechanical ventilation, including the physiology of positive pressure breathing, techniques of ventilation, characteristics of commonly used ventilators, and monitoring of the ventilator-patient system.

257 Respiratory Physiology (2) An in-depth study of breathing mechanics, pulmonary circulation, ventilation/perfusion ratios, regulation of ventilation, and gas transport.

258 Aspects of Respiratory Therapy II (2) A continuation of HEA 253. Topics include rehabilitation, home care, administration and organization, respiratory pharmacology, and infection-control techniques.

259 Clinical Practice II (4) An intensive exposure to noncritical patient care areas. Performance evaluation of basic therapies to include humidity, aerosol, oxygen, chest inflation techniques, suctioning, and chest physical therapy.

260 Cardiopulmonary Diseases (2) A comprehensive study of cardiopulmonary diseases and treatment. Includes pulmonary diagnostic procedures.

261 Respiratory Therapy Seminar I (2) Includes critical, written analysis, and discussion of pertinent respiratory care literature as well as elements of research relevant to the respiratory care profession. The students culminate their study of respiratory care by designing and implementing a miniresearch project.

262 Clinical Practice III (2) An introduction to critical and specialized respiratory care areas followed by discussions and correlation to didactic work.

263 Cardiopulmonary Evaluation (3) An in-depth study of monitoring and evaluation techniques including modules on cardiopulmonary physiology, electrocardiographic monitoring, and hemodynamic monitoring. Interpretation and application data is emphasized. Appropriate lab experience is included.

264 Clinical Practice IV (5) An intensive exposure to critical care and specialized areas of respiratory care. Performance evaluation of therapies and procedures to include mechanical ventilator set-up, and evaluation, neonatal ventilator set-up, pulmonary function assessment, arterial line set-up, and arterial line blood withdrawal.

265 Pediatric/Neonatal Respiratory Care (2) A comprehensive study of neonatal and pediatric respiratory care, including fetal lung development, pathophysiology of the neonate and pediatric patient, and related respiratory care procedures.

266 Pharmacology (2) An in-depth study of various drug categories including drug-dose response and principles of absorption, distribution, metabolism, and excretion.

301 Health for the Elementary Grades (3) Principles and procedures for meeting the health needs of the child.

303 Introductory Principles of Human Nutrition (3) Practical approach to the role nutrition and dietetics play in improving the quality of our lives—socially, physically, mentally, and emotionally. Dispelling of fads and fallacies.

304 Family Life and Sex Education (3) Basic concepts and objectives of such a program for students at different age levels. Organizing, launching, and evaluating the program.

305 Contraceptive Technology and Health Issues (3) The course will teach contraceptive methods, reasons for a society's acceptance or rejection of certain methods, and the effect on the health care delivery system.

306 Curriculum and Instruction in Health (3) A comprehensive study of the materials available in health education and the techniques for their implementation.

◆ 308 Field Experience in Health Education (1) Opportunities for observation and field experience in health science settings.

310 Love and Marriage (3) Defines love and marriage for the student and teaches the skills essential to fulfilling those needs.

311 Applied Nutrition (3) A study of methods of nutritional assessment, community aspects of nutrition, nutrition and the lifecycle, and concepts of meal planning. PREREQ: HEA 303.

312 Food Science (4) A study of the chemical, physical, and biological effects of processing, storage, and preservation on the structure, composition, palatability, and nutritive value of food. (Includes a lab)

313 Food Service Systems Management (4) A study of the organization and administration of food service systems and the functions and responsibilities specific to this management. Personnel, food cost, accounting, production, and service facility planning and environmental design will be examined. Quantity food production also will be studied.

320 Positive Aspects of Aging (3) Describes past, present, and projected information concerning the aging process in normal human development.

325 Stress Management (3) Comprehensive survey of stress concepts, theories, and management techniques. Emphasis is placed on personal application.

330 Health Behavior (3) Individual and group health behavior of children and adults at different levels of wellness and in various settings. Past and current theories of health behavior with methods of application by health professionals will be included. PREREQ: HEA 100, 241, and 242.

331 Health Promotion in the Workplace (3) A study of current health promotion efforts and programs for employees and management personnel at the worksite.

341 Chronic and Communicable Diseases (3) A study of the disease process, including causes, effects, and control of selected diseases with an emphasis on disease prevention and health promotion. PREREQ: HEA 241 and 242.

342 Program Planning and Evaluation (3) Provides an in-depth study of the program planning process and evaluation methods. Needed skills are developed and experience given in writing programs from assessment through evaluation with both hypothetical and real populations. PREREQ: HEA 341.

402 Blood Pressure Measurement (1) The course will teach the technique for accurate blood pressure measurement, proper referring and recording procedures, and the necessary communication skills with clients.

404 Student Teaching: Middle School (6) Practical classroom experience in teaching health education. PREREQ: HEA 303, 304, 306, and 308.

405 Student Teaching: Secondary School (6) Practical classroom experience in teaching health education. PREREQ: HEA 404.

408 Dental Hygiene Field Experience (6) Field experience for dental hygienists who are working towards certification as public school dental hygienists, or are preparing to teach in a school of dental hygiene.

410 Mental Health (3) Designed to aid persons in improving their understanding of themselves and others. Emphasis on ways to recognize mental health problems.

411 Advanced Human Nutrition I (3) In-depth examination of the digestion, transport, and metabolism of carbohydrates, lipids, and proteins. Special emphasis is placed on metabolic interrelationships and hormonal control of the three processes mentioned above. PREREQ: BIO 110, 259, 269; CHE 230, 404; HEA 303.

412 Advanced Human Nutrition II (3) In-depth examination of the digestion, transport, and metabolism of vitamins, minerals, and water. Special emphasis is placed on digestive and metabolic interrelationships and hormonal control. PREREQ: BIO 110, 259, 269; CHE 230, 404; HEA 303.

413 Nutritional Aspects of Disease I (3) This course covers nutritional assessment, drug-nutrient interactions, nutritional therapy in diseases of infancy and childhood, gastrointestinal diseases, diseases of the liver and gallbladder, and surgery. PREREQ: BIO 110, 259, 269; CHE 230, 404; HEA 303, 311.

414 Nutritional Aspects of Disease II (3) This course covers nutritional therapy in coronary heart disease and hypertension, diabetes mellitus, renal disease, cancer, and disabling diseases. PREREQ: BIO 110, 259, 269; CHE 230, 404; HEA 303, 311.

420 Preparation for Internship (3) A comprehensive study and integration of the areas of responsibility for the public health major and their corresponding functions and skills essential for a successful internship. PREREQ: HEA 342.

421 Public Health Internship (12) A practical, full-time work experience in a hospital, public health agency, or company, jointly supervised by an on-site supervisor and a public health faculty member. PREREQ: HEA 420.

◆ 425 Independent Study (1-3) The student will initiate a health-related research study or project under faculty supervision.

◆ 435 Health Workshop (1-6) Special workshops on contemporary health problems and issues. Topics announced at time of offering.

440 School Health Program (3) School health services, environment, and instruction, and organization and administration of a school health program.

470 Advances in Respiratory Therapy I (3) A comprehensive examination and investigation of recent advances in respiratory therapy designed for the registered or registry-eligible therapist.

471 Individualized Study in Respiratory Care (3) A course to gain didactic knowledge through independent readings and research in a chosen subspecialty. Practical application is stressed through a minimum of 112 hours of field experience in an appropriate setting.

◆ This course may be taken again for credit.

Department of Nursing

Ann Coghlan Stowe, *Chairperson*
Susan C. Slaninka, *Assistant Chairperson*

PROFESSOR: Slaninka

ASSOCIATE PROFESSORS: Haus, Hickman, Perciful

ASSISTANT PROFESSORS: Brown, Conroy, Coghlan Stowe, Devlin-Kelly, Garrett, Knauss, Matz, Nester

INSTRUCTOR: Tucker

The Department of Nursing is accredited by the National League for Nursing and approved by the State Board of Nursing of the Commonwealth of Pennsylvania.

Admission Criteria

Applicants for nursing must have completed work equal to a standard high school course, including a minimum of 16 units: four units of English, three units of social studies, two units of mathematics (one of which must be algebra), and two units of science with a related laboratory course or the equivalent. A combined score of 1000 is expected on the SAT.

BACHELOR OF SCIENCE IN NURSING

The Bachelor of Science degree program in nursing is offered by the Department of Nursing, which is an integral part of the School of Health Sciences. The family-centered program is based on the concept that the person is a biopsychosocial being with basic health needs. The Department of Nursing believes that high-quality health care is a basic right of all people and that health care needs can be met through the practice of the professional nurse who has completed a systematic program of courses in the social and natural sciences, humanities, and the nursing major.

Characteristics of the graduate include: 1) an awareness of, and sense of responsibility for, contemporary health and social issues; 2) advocacy for health care improvement in society through professional citizen activities at various adaptational levels and developmental stages in a variety of settings; 3) accountability and competency in utilizing the nursing process to assist clients; 4) collaboration, coordination, and consultation as a colleague in the interdisciplinary health team; 5) belief in learning as a life-long process; 6) participation in the change process by collection of data applying to nursing theories and practice.

DEGREE REQUIREMENTS

1. Core Requirements*
   BIO 100, 204, 259, 269, and 307; CHE 103-104 and CRL 103-104 *or* CHE 107 and CRL 107; CHE 230, and 404; ENG 120 and 121; MAT 121; PSY 100, 210, and 375; and SOC 200 and 240
2. Nursing Concentration Requirements
   NSG 212, 311-312, and 411-412; NSL 212, 311-312, 411-412; and one nursing elective.

A total of 130 credits is required for graduation.

Special Requirements

Generic nursing candidates are admitted once a year, in September.

Transfer students can be admitted in spring and fall.

Nursing students are required to supply their own transportation to clinical facilities.

Insurance. Students are required to carry liability insurance coverage in the amount of $1,000,000/$3,000,000 during the junior and senior year at a yearly cost of approximately $30. Students also are required to carry health insurance.

Uniforms. Students are required to wear white uniforms to some of the clinical experiences during the junior and senior years. Uniform policies are presented in detail in the current issue of the department handbook.

CPR Certification. Students enrolled in nursing courses with a clinical component are required to be currently certified by the American Red Cross, American Heart Association, or other acceptable resource in Life Support (two-person) Cardiopulmonary Resuscitation. The CPR course must include resuscitation of children and infants.

Calculations exam. Competency in calculation of dosages is a prerequisite to NSG/NSL 311. The student is required to have attained 100% proficiency in calculating dosages as measured by a paper and pencil test. The nursing laboratory coordinator administers the calculations exam in the spring semester immediately prior to enrolling in the clinical courses.

Mosby Assess Test. All senior students must complete the Mosby Assess Test prior to graduation. Cost is assumed by the student.

Health Requirements

Nursing candidates must meet the general health requirements of all students at West Chester University for the freshman and sophomore years. Candidates must meet the following health requirements during the summer prior to the junior and senior years: inoculations against diphtheria, typhoid, tetanus, measles, poliomyelitis (a series of four), and Hepatitis B; a complete physical examination that must include a complete blood count, blood serology, TB skin test, urinalysis, dental and eye examinations, and any other diagnostic tests deemed necessary.

Academic Promotion Policy

Incompletes, Failures, and D Grades

All nursing students who have a grade of I (Incomplete), D, or F in required courses during the freshman and sophomore years must repeat these courses and achieve a satisfactory grade (C– or above)

*Some of these courses may be used to satisfy distributive requirements.

before entering the junior-level nursing major courses. Nursing students must have a 2.00 GPA before entering the clinical courses at the junior year.

A student must achieve a grade of C– or better in the nursing major in the junior year for promotion to the senior year and achieve at least a C– in the senior year for graduation. Students also must achieve at least a C– in BIO 307, MAT 121, and PSY 375.

If a student must repeat a nursing course, a grade of C– or better in both the theory and laboratory (clinical practicum) components must be achieved. The theory and clinical portions of a nursing course must be taken concurrently. Not achieving at least a C– in such cases is considered grounds for dismissal from the nursing major.

Other policies are explained in detail in the current issue of the department handbook.

Nursing Laboratory

The nursing laboratory in the basement of the Old Library building is available as a resource to help the nursing student in the learning process. There are two sections of the laboratory. One area houses a variety of equipment that allows the student to view audio-visual material such as filmstrips, slides, and videocassettes related to psychomotor skills involved in nursing. This equipment can be used individually or in small groups. The other section contains equipment that allows the student to practice these skills. Computers are available in the labs for use with various software packages.

Every student is required to use the learning laboratory at specified times. In addition, students are expected to spend time utilizing this resource for independent learning based on their individual needs. The laboratory is staffed by a full-time nursing laboratory coordinator who is a registered nurse. The hours when the lab is open will be posted.

Transfer Policy

Transfer students are accepted into the nursing major. The number will be limited annually to the number that the department can accommodate in a sound educational experience.

Students currently enrolled at West Chester University who wish to transfer in to the Department of Nursing must attend a transfer information session to begin the process and subsequently submit an application packet to the department. All application procedures must be completed by the deadlines established by the Department of Nursing in order for the candidate to be considered for entrance into the nursing major.

All students who wish to transfer into the Department of Nursing must:

1. show evidence of satisfactory completion (70% or better) in BIO 100, 110, or 259, CHE 103 and CRL 103, or CHE 107 and CRL 107, ENG 120, and PSY 100 or SOC 200
2. meet with the adviser in the Department of Nursing to sign an individualized "agreement" that reserves placement in clinical nursing courses during the academic year identified.

Admission to the nursing major is extremely competitive. Each year requests for transfer into the major may exceed our ability to offer admission. Successful completion of prerequisite courses *does not* guarantee that a student will be immediately accepted into the major or be able to start the clinical portion of the major the following semester. This may have significant financial implications for students and could result in delayed graduation.

Degree Program for Registered Nurses

The department also offers a program for registered nurses who wish to earn a baccalaureate degree in nursing. The registered nurse is required to complete a series of nursing examinations to demonstrate current nursing knowledge and determine placement in the nursing major. Detailed information about this program may be obtained from the Office of Admissions or the department office.

Licensing Eligibility in Pennsylvania

In order to be employed in professional nursing, students must apply for a temporary practice permit through the State Board of Nursing.

Students must meet all program requirements to be eligible for the NCLEX Examination upon graduation. Passing this examination designates Registered Nurse (RN) status. In accordance with the January 1, 1986, Professional Nursing Law (P.L. 317, No. 69), felonious acts prohibit licensing in Pennsylvania in accordance with the following guidelines:

The State Board of Nursing in Pennsylvania shall not issue a license of certificate to an applicant who has been:

1. Convicted** of a felonious act prohibited by the act of April 14, 1972 (P.L. 233, No. 64), known as "The Controlled Substance, Drug, Device and Cosmetic Act", or
2. Convicted** of a felony relating to a controlled substance in a court of law of the United States or any other state, territory, or country unless:
   a. At least 10 years have elapsed from the date of the conviction;
   b. The applicant satisfactorily demonstrates to the board significant progress in personal rehabilitation since the conviction such that licensure should not create a substantial risk of further violations; and
   c. The applicant otherwise satisfies the qualifications contained in this act.

   A person convicted of any felonious act may be prohibited from licensure by the Board of Nursing at any time.

**Convicted includes a judgment, an admission of guilt, or a plea of nolo contendere.

COURSE DESCRIPTIONS
NURSING

Symbol: NSG

109 Health Issues of Women (3) (Offered jointly with Department of Health, as NSG/HEA 109) This course encompasses the needs and concerns of women as consumers in our present health care system. It examines various biological, psychological, and social topics related to women's health care, including medical abuses, sexuality, sex roles, and women's health in the workplace. This course is an enrichment to liberal education, encouraging inquiry into previously neglected areas of women and health. It is offered in the Women's Studies Program and is open to all University students, regardless of major, as an elective.

110 Transcultural Health: Principles and Practices (3) (Offered jointly with Department of Health, as NSG/HEA 110) This course examines the health beliefs and practices of a variety of subcultural groups in the U.S. Emphasis is placed on the application of multicultural health beliefs to the caring process. It utilizes the cross-cultural approach in meeting the health needs of clients and families. It is open to all University students, regardless of major, as an elective.

212 Nursing Theories and Concepts (4) Taken in the sophomore year. Nursing theories and concepts, conceptual frameworks, theories from other disciplines that may apply to nursing, and the nursing process are studied in this course. PREREQ: Sophomore standing.

NSI. 212 Nursing Theories and Concepts Lab (2) (Must be taken with NSG 212) This clinical experience includes interviewing skills, physical and psychosocial assessment, vital signs measurement, basic hygienic practices, body mechanics, and infection control.

214 Proseminar: Nursing Theories and Concepts (3) The student examines various nursing theories and concepts; conceptual frameworks; theories from other disciplines that apply to nursing; nursing history; nursing education; professionalism in nursing, the nursing process; the ethical, legal, and political aspects of nursing; and current issues in nursing. This course is a prerequisite for upper-division nursing courses and serves as a transition to subsequent nursing courses. There is no clinical practicum associated with NSG 214. PREREQ: RN licensure.

216 Adaptations in the Aged (3) The student will have the opportunity to form a relationship

with a healthy, elderly individual. Students will utilize communication skills through interaction on a one-to-one basis with senior citizens in a private home setting. Students will become acquainted with the problems of day-to-day living and the crises that face this population along with the adaptive strengths and resources that are an essential part of the healthy older person's personality.

217 Loss and Grieving: What to Say, What to Do (3) Loss, grief, and/or depression are universal experiences. Concrete measures to help oneself and peers better cope with these experiences are presented. Barriers that make providing comfort and support to others difficult or uncomfortable are identified and discussed. Effective measures for talking with and helping those who are grieving, depressed, or suicidal are presented, and each student is assisted to develop his or her own style in comfortably using selected approaches. Classes will be participatory with minimal lecture.

218 Concepts in Caring (3) The emphasis of this course is that caring is a universal concept that can be viewed from many disciplines. Nurses, professionals in the caring business, serve as the guides in a creative journey connecting human caring and the various disciplines.

219 Computers and the Health Care Delivery System (3) This elective course will be of practical importance to any student who is interested in the impact of computers on the health care delivery system. The course is divided into three areas: 1) an overview of the computer; 2) application of the computer to the health care delivery system including the role of the health care professional and the consumer; and, 3) issues pertaining to the computer and the health care delivery system. Use of the computer with a variety of applications and CAI software is integrated throughout the course.

311 Adaptation I (5) Must be taken during junior year, fall semester. The emphasis of this course is on the prevention of illness and promotion of health by assessment of the health status, appropriate intervention, and evaluation of the health promotion plan. The nursing process provides the framework for promotion of wellness in a variety of settings with clients of any age group.

NSL 311 Adaptation I Laboratory (5) Clinical experiences are provided in agencies where relatively well populations have been identified, such as schools, nursery schools, well baby clinics, and health maintenance clinics. NSG 311 and NSL 311 always must be taken concurrently. PREREQ: BIO 100, 204, 259, and 269; CHE 103-104 and CRL 103-104 *or* CHE 107 and CRL 107, CHE 230, and 404; ENG 120 and 121; NSG 212 and NSL 212; PSY 100 and 210; and SOC 200 and 240.

312 Adaptation II (5) Must be taken during junior year, spring semester. The emphasis of this course is on the maintenance of health and promotion of adaptive responses in clients with chronic health problems. The nursing process is used to assist these clients to adapt to stressors through supportive therapeutic, palliative, and preventive measures.

NSL 312 Adaptation II Laboratory (5) Clinical experience is provided in settings where clients with chronic health problems have been identified. These settings include rehabilitation centers, a child development center, nursing homes, and acute care settings. These environments provide flexibility for students to implement changes for clients and acquire skills that will be utilized in other nursing courses. NSG 312 and NSL 312 always must be taken concurrently. PREREQ: BIO 307, NSG 311, and NSL 311.

314 Internship (3) This course is designed to provide nursing students with the opportunity to enhance knowledge and skills acquired in NSG/NSL 311-312. Students will have the opportunity to participate in the care of a group of clients over a consecutive span of days and to increase their awareness of the professional role. PREREQ: Successful completion of NSG/NSL 311-312.

316 Coping with Cancer (3) The emphasis of this course is on coping with clients who have cancer. Various physiological and psychosocial effects this disease has on clients and their families will be examined. The course will allow students to explore their own feelings related to cancer and assist them in their contacts with cancer clients. Topics that will be discussed include dealing with loss, pain, pain management, hospice care, and communication with the cancer client. This course is open to all students.

367 Nursing Implications of Drug Interactions (1) The student will be introduced to essential pharmacological principles and concepts. The nursing process will provide the framework by which students will apply theoretical knowledge in BIO 367 to situations in a variety of health-care settings. To be taken in conjunction with BIO 367, or after, with permission of instructor.

◆ 410 Independent Study in Nursing (2) The student produces an independent, research-oriented project under close faculty advisement on a nursing topic of special interest to the student. Participation in a selected field experience is optional. PREREQ: Permission of department chairperson.

411 Advanced Adaptational Problems I (5) Must be taken during senior year, fall semester. The emphasis of this course is on the study of adaptive responses that create new stresses, requiring additional adaptations and frequently interrupting an individual's mode of functioning. The nursing process is used to assist clients in crises.

NSL 411 Advanced Adaptational Problems I Laboratory (5) Clinical experience is provided in acute care settings, in psychiatric in-patient settings, and in community health settings. NSG 411 and NSL 411 always must be taken concurrently. PREREQ: MAT 121, NSG 312, NSL 312, and PSY 375.

412 Advanced Adaptational Problems II (6) Must be taken during senior year, spring semester. NSG 412 is a continuation of NSG 411 with the emphasis on the subconcepts of decision making and advocacy. The nursing process is utilized interdependently in approaching multi-health care problems of clients. Special attention is given to inquiry as the student correlates nursing theories and concepts with identifiable research problems in varied environments. Opportunity is provided in this semester to develop organization and management skills.

NSL 412 Advanced Adaptational Problems II Laboratory (5) Clinical experience is provided in acute care settings, psychiatric inpatient settings, and community health settings. NSG 412 and NSL 412 always must be taken concurrently. PREREQ: NSG 411 and NSL 411.

◆ This course may be taken again for credit.

Department of Physical Education

Monita Lank, *Chairperson*

John Helion, *Assistant Chairperson—Physical Education Sport and Safety, Coordinator Field Experience*

Sue Lubking, *Assistant Chairperson—Student-Designed Concentration*

Paul Smith, *Assistant Chairperson—Exercise Science and Graduate Studies*

Susan Parkinson, *Coordinator of Required Physical Education Program*

Barbara Lappano, *Coordinator—Recreation, Leisure, and Dance*

Richard Yoder, *Coordinator of Safety Education*

PROFESSORS: Lank, Yoder

ASSOCIATE PROFESSORS: Bonsall, Goodwin, Karas, Lepore, Lubking, Parkinson, Smith, Williams, Wintermute

ASSISTANT PROFESSORS: Caldwell, Fry, Helion, Jones, Koehler, Lappano, Lauletta, Pagano, Ray, Remley, Stevens, Thielz, Todd, Trnka, Volkwein

The Department of Physical Education offers three programs leading to the Bachelor of Science degree.

1. The B.S. in HEALTH AND PHYSICAL EDUCATION— TEACHER CERTIFICATION is for students interested in earning state teaching certification.

2. The B.S. in HEALTH AND PHYSICAL EDUCATION—STUDENT DESIGNED concentration is for students interested in preparing for a specific career that is related to health and physical education but does not require teacher certification.

3. The B.S. in HEALTH AND PHYSICAL EDUCATION—PHYSICAL FITNESS is designed for students interested in the exercise sciences. This program provides academic preparation for individuals who seek to plan and conduct physical fitness programs for healthy adults.

BACHELOR OF SCIENCE — HEALTH AND PHYSICAL EDUCATION—TEACHER CERTIFICATION

1. General Education Requirements, see pages 35–39 — 51 semester hours
2. Physical Education Theory — 47 semester hours
   PED 100, 243, 251, 257, 271, 310, 350, 351, 352, 353, 361, 451, 453, 489, 490, and 492
3. Related Requirements — 24 semester hours
   COM 101, EDF 100, EDP 250, HEA 100, 201, 202, HEA 206 or PED 385, HEA 306
4. Related Requirements that also satisfy the General Education Requirements
   BIO 259 and 269, CHE 102, and PSY 100
5. Required Activities — 10 semester hours
   PED 109, 110, 111, 112, 113, 140, 141, 142, 143, 144, 208, 209, 210, 211, 212, 213, 214, and 242
6. Area of Concentration — 6 semester hours
   Students who elect an area of concentration must select any six hours of courses from those listed under all areas of concentration.
7. Three extracurricular experiences prior to student teaching
8. GPA Requirement
   Students must maintain a 2.5 GPA or higher to remain in good standing in this program. Refer to the Teacher Certification section in this catalog.
9. Certification granted when Pennsylvania requirements are met

BACHELOR OF SCIENCE — HEALTH AND PHYSICAL EDUCATION—STUDENT-DESIGNED CONCENTRATION

1. General Education Requirements, see pages 35–39 — 51 semester hours
2. Physical Education Theory — 19 semester hours
   PED 100, 251, 257, 271, 352, 451, and 453
3. Related Requirements — 12 semester hours
   COM 101, HEA 100 or HEA 201, HEA 202, HEA 206 or PED 385
4. Related Requirements that also satisfy the General Education Requirements
   BIO 259 and 269, CHE 102, and PSY 100
5. Physical Education Activities — 6 semester hours
6. Student-Designed Curriculum — 34 semester hours
7. Intern Experience — 12 semester hours
8. Three Extracurricular Experiences
9. Prephysical therapy and preoccupational therapy students need a 2.50 GPA before submitting a final proposal.
10. Students must have a 2.00 GPA for application to the student-designed curriculum.

BACHELOR OF SCIENCE — HEALTH AND PHYSICAL EDUCATION PHYSICAL FITNESS SPECIALIST

1. General Education Requirements, see pages 35–39 — 51 semester hours
2. Physical Education Theory — 22 semester hours
   PED 100, 251, 257, 271, 352, 385, 451, and 453
3. Related Requirements — 15 semester hours
   COM 101, HEA 100, HEA 202 or elective, HEA 303, and MGT 300
4. Related Requirements that also satisfy the General Education Requirements — 18 semester hours
   BIO 259 and 269, CHE 102, CSC 101, and PSY 100
5. Physical Fitness Specialist Program — 22 semester hours
   PED 361, 429, 431, 432, 434, 453, and SMD 454, and PED 433 or HEA 325
6. Physical Education Activities — 6 semester hours
7. Intern Experience — 12 semester hours
8. Extracurricular Experience
9. Grade requirement of at least a C- in concentration courses
10. Student must have a 2.00 GPA for internal transfer and a 2.50 before submitting final proposal.

AREAS OF SPECIALIZATION

Elementary Physical Education
Students may select from the following courses:
PED 340, 354, 440, 449, and 453

Secondary Health Education
Required: BIO 203, HEA 103, 105, 106, 301, 305, 401, 410, and SOC 250

Secondary Physical Education
Students may select from the following courses:
PED 310, 311, 314, 316, 318, 319, 320, 321, 322, 323, 324, 326, 327, 328, 331, 430, 452, 453, and SMD 454

Special Physical Education
Required: PED 360, 362, 379, and 457, and PEL 362

Driver-Safety Education — 12 semester hours
(State Certification)

West Chester offers certification in Driver Education and Safe Living (Highway Safety and General Safety Education).

Completion of the following program will enable teachers to endorse their teaching certificates with this area. Students must apply for the endorsement through the office of the dean of the School of Education.

Required: Accident Causation and Prevention (PED 355), Critical Problems Within the Highway Transportation System (PED 356), High School Driver Education Program Management (PED 450), and Introduction to the Driving Tasks (PED 456). NOTE: This program meets state certification requirements for driver-safety education.

Recreation and/or Outdoor Education

This is a two-track program. The student may, under advisement, select courses in recreational services and/or outdoor education from the following list: Arts and Crafts (PED 367), Leadership in Recreation (PED 368), Principles of ROPE (PED 369), Camp Counseling (PED 370), Wilderness Adventure I (PED 371), Wilderness Adventure II (PED 372), Outdoor Recreation (PED 375), Intramural and Recreation Sports (PED 377), Planning Facilities for Athletics, Physical Education and Recreation (PED 430), Supervised Camp Leadership (PED 467), and Leadership in Recreational Outdoor Pursuits (PED 470).

Minor in Coaching — 15-18 semester hours

Those students who successfully complete the program at West Chester earn a transcript and written endorsement from the School of Health Sciences attesting to school administrators that recipients have attained basic preparation for coaching. Students pursuing the B.S. in health and physical education automatically achieve coaching certification.

Certification requires competencies equivalent to 15-18 hours of course work. Behavioral competencies in the theoretical foundations of coaching, skill acquisition, and management techniques also are

required. Course offerings at the undergraduate and graduate levels are available. The program is open to any person who applied for admission through the program adviser, Ms. Thielz. Applicants should direct inquiries to that office for a coaching minor brochure.

Minor in Dance — 21 semester hours

Required Core: History of Dance (PED 344), Dance Composition and Choreographic Techniques (PED 441), and Independent Study. This is a two-track program. Beyond the required core courses, the student may select course(s) under educational concentration or theatrical performance concentration. Other program requirements include assisting in teaching, under the direction of a faculty member, and a minimum of two semesters of performance or work for a production. Application for this program can be obtained from Barbara Lappano, dance coordinator.

Facilities

Facilities to support the programs of the department have kept pace with a rapid increase in students and faculty. The Health and Physical Education Center and field complex, located on South Campus, provide the University with one of the nation's outstanding facilities for education and research in health and physical education. Among the center's notable components are its research facilities, its multipurpose teaching stations, and a one-acre gymnasium that can be divided into six, separate, pneumatically sealed gymnasiums. A vast complex of tennis courts and baseball, lacrosse, field hockey, soccer, and football fields also are located on the South Campus.

NOTE: Students who choose to fulfill their art requirement through the dance curriculum must do so as follows:

Two Credits	Course Selections
PED 344	History of Dance
PED 345	Dance Production Workshop
PED 441	Choreography
PED 446	Repertory Performance
One Credit	**Course Selections**
PEA 132	Modern Dance I
PEA 133	Jazz Dance I
PEA 134	Ballet I
PEA 135	Tap Dance I
PEA 233	Jazz Dance II
PEA 234	Ballet II
PEA 235	Tap Dance II
PEA 334	Ballet III

COURSE DESCRIPTIONS
PHYSICAL EDUCATION ACTIVITY COURSES

Symbol: PEA (2) (1) These courses meet the Physical Education Activity General Education requirement except for students whose majors have obtained University approval for PED courses.

The first number in parentheses shows the number of class meetings per week; the second one shows the semester hours of credit. A program of selected activities for nonphysical education students. (Formerly designated PED 101-102)

100 Basic Swimming (for nonswimmers)
101 Swimming Styles (strokes)
102 Springboard Diving
104 Skin and Scuba Diving*
105 Sailing*
106 Canoeing
107 Orienteering
108 Rock Climbing and Rappelling
109 Backpacking and Camping
110 Cycle Touring
111 Cross Country Skiing*
112 Horsemanship*
113 Angling
114 Downhill Skiing*
◆ 115 Physical Conditioning
116 Personal Defense
117 Karate*
◆ 118 Ice Skating*
119 Archery
120 Badminton
121 Bowling*
122 Fencing
123 Golf
124 Gymnastics/Men
125 Gymnastics/Women
126 Handball/Racquetball*
127 Squash
128 Tennis
129 Basketball
130 Softball
131 Volleyball
132 Modern Dance I
133 Jazz Dance I
134 Ballet I
135 Tap Dancing
136 Fitness for Life (Theory and Lab)
◆ 140 Aerobic Dance—Fitness
141 Water Fitness
190 General Activity
201 Power and Competitive Swimming
212 Advanced Horsemanship*
214 Advanced Skiing*
226 Advanced Racquetball*
228 Advanced Tennis
231 Advanced Volleyball
233 Jazz Dance II
234 Ballet II
235 Tap II
334 Ballet III—Pointe

236 Developing Personal Fitness Programs (2) This course is designed to provide the student with a basic understanding of the scientific basis of physical fitness. The course is intended to help each student in developing a personal fitness profile and subsequent program of physical activity that will result in healthful living. The course will make use of practical experience and actual participation in fitness activities. Individual programs will be emphasized.

*Additional fee required
◆ This course may be taken again for credit

PHYSICAL EDUCATION

Symbols: PED; PEL indicates lab course. These courses do not meet the Physical Activity General Education requirement except for students whose majors have obtained University approval for such courses. These courses are for physical education majors only, with the following exceptions: elementary education majors, early childhood education majors, music majors, and sports medicine majors.

The first number in parentheses shows the number of class meetings per week; the second one shows the semester hours of credit.

100 Foundations of Physical Education and Sport (2) (2) An introduction to the discipline and profession of physical education and sport, with an emphasis on career guidance. The history and tradition of the field will be traced to provide perspective for student choices during their undergraduate education. Field experiences and advice will expose students to the current opportunities and methods for achieving personal goals.

107 Music and Movement (2) (1) A course that examines and develops the concept of music and rhythm through movement skills.

109 Wrestling (nine weeks) (3) (½) The teaching of the basic skills of the sport of wrestling. Fundamental skills, tactics, rules, and combative, lead-up activities for presentation to physical education classes in the public schools.

110 Soccer (nine weeks) (3) (½) The teaching of the basic skills of the sport of soccer. Fundamental skills, tactics, rules, and lead-up games are presented for all school ages.

111 Basketball (nine weeks) (3) (½) Emphasis is placed on fundamental skills, rules, and tactics of the sport, accomplished through drills and game situations.

112 Gymnastics I (3) (1) Apparatus skills, stunts, tumbling, and pyramids for teaching all age levels.

113 Physical Conditioning (nine weeks) (3) (½) The teaching of activities to help develop total health, especially physical fitness. Circuits of exercises, weight training, running, and rope jumping are included for all ages.

140 Aquatic Fundamentals and Emergency Water Safety (3) (1) Review of basic aquatic skills. Emphasis on lifesaving practices, safety, and survival techniques. Successful completion of this course may lead to advanced lifesaving certification by the American Red Cross.

141 Fundamental Movement (3) (1) Fundamental locomotor and axial movement; music and rhythm in relationship. Rhythmical activities for the elementary program with suggested teaching methods.

142 Tennis (nine weeks) (3) (½) An explanation of the mechanics and specific skills of tennis. Emphasis is placed on conceptual understanding and teaching progressions and methods.

143 Golf (nine weeks) (3) (½) The teaching of the basic skills of golf. Class management, techniques, rules, and safety procedures to present to physical education classes.
144 Archery/Badminton (nine weeks) (3) (½) The teaching of the basic skills of archery and badminton. Class management, techniques, rules, and safety procedures to present to physical education classes.
200 Elementary School Physical Education (3) (2) Theoretical and practical approach for the teaching of physical activities to elementary school children by the classroom teacher.
208 Self Defense (nine weeks) (3) (½) The teaching of the basic skills of self defense. Fundamental skills, tactics, and methods of presentation to school-age groups.
209 Track and Field (nine weeks) (3) (½) Principles of running, throwing, and jumping. Modification needed for physical education classes. Self-testing.
210 Softball/Baseball (nine weeks) (3) (½) The teaching of the basic skills of softball and baseball. Fundamental skills, tactics, rules, and lead-up games for presentation to all ages.
211 Hockey (nine weeks) (3) (½) Basic fundamentals, tactics, and rules. Modified active games. Geared to teaching physical education classes.
212 Football (nine weeks) (3) (½) The teaching of basic football skills. Fundamental skills, tactics, rules, and lead-up games for all school ages.
213 Lacrosse (nine weeks) (3) (½) Basic fundamentals, tactics, and women's rules. Modified active games. Geared to teaching physical education classes.
214 Volleyball (nine weeks) (3) (½) The teaching of the basic skills of volleyball. Fundamental skills, tactics, rules, and lead-up games for all school ages.
215 Preparation for Teaching Dance Technique (3) (1) Basic course offering methods and materials for teaching dance technique.
242 Methods and Skills of Dance in Education (3) (1) To provide the student with a generalized coverage of various dance forms that could be taught within the educational field, such as social dance, folk dance, square dance, aerobics, or jazzercize.
243 Preparation for Teaching Activities (3) (1) Methods of teaching in all areas of physical education and the development of appropriate lesson plans for all ages. PREREQ: Four activity courses.
244 Software Applications in Physical Education (3) Students apply word processing and graphics software to produce knowledge tests, worksheets, skill checklists, certificates of merit, and public relations handouts. Spreadsheet software will be applied to budget and inventory projects. Grading, crossword puzzle, computer-assisted instruction, and physical fitness assessment software also will be applied. Students also will learn E-Mail.
245 Lifetime Fitness Concepts (3) (3) Designed to provide an interdisciplinary understanding of the relationship between lifestyle, physical fitness, and health and well-being.
251 Physical Activity for Special Children (3) (3) A course of adapted physical education. Common childhood disabilities are studied with emphasis on problems of a chronic nature. Also screening and practical training and working with physically and mentally handicapped children.
PEL 251 Physical Education for Special Children (LAB) (0) A practical working experience with children and adults who have disabilities.
252 Classroom Activities for the Special Child (3) (3) To acquaint special education teachers with physical education activities useful in the classroom. PREREQ: BIO 209.
257 Principles and Practices of Recreation (3) The basic principles of planning, administering, and evaluating recreational programs for all ages in a variety of settings and participating in suitable recreational activities.
271 First-Aid and Athletic Training (3) (2) A course designed to qualify students in American Red Cross first-aid and CPR, and to introduce the principles of athletic injury prevention and management. Offered in fall and spring semesters.
275 Lifeguarding (3) (2) Theory and techniques relative to preventive lifeguarding, emergencies in and around water, water rescues, search and recovery operations, types and uses of equipment, records and reports, health and sanitation, and supervision of waterfront areas.
310 Preparation for Teaching Secondary Physical Education (3) (2) Each student develops a physical education activity unit and teaches one lesson from that unit. Further opportunities for familiarization with various teaching methods and styles through observation, demonstration lessons, and actual practice.
311 Coaching Racquet Sports (3) (3) Advanced coaching and teaching techniques for the racquet sports, including tennis, badminton, racquetball, and squash.
314 Track and Field II (3) (2) PREREQ: PED 209.
316 Basketball II (3) (2) PREREQ: PED 111.
318 Lacrosse II (women's equipment) (3) (2)
319 Lacrosse II (men's equipment) (3) (2)
321 Volleyball II (3) (2) PREREQ: PED 214.
322 Soccer II (3) (2) PREREQ: PED 110.
323 Field Hockey II (3) (2) Individual and team tactics and special situations. Basic knowledge needed for coaching hockey. PREREQ: PED 211.
324 Football II (3) (2) Skills, tactics, and strategies for coaching football.
326 Wrestling II (3) (2) PREREQ: PED 109.
327 Gymnastics II (women's equipment) (3) (2) Teaching and coaching techniques for apparatus stunts, tumbling, and pyramids. PREREQ: PED 113.
328 Gymnastics II (men's equipment) (3) (2) Advanced work on gymnastics apparatus, including trampoline, with emphasis on teaching progression, spotting techniques, and class safety. PREREQ: PED 112.
331 Water Safety Instruction (3) (2) Leadership procedure in aquatics activities for schools and school camps. Swimming strokes and life-saving techniques are analyzed. Opportunity to qualify as a waterfront safety instructor.
340 Self-Testing Activities in Elementary School Physical Education (2) (2) Theory and methods to present activities to children on an individualized, self-testing basis. The opportunity is provided for direct contact with children to try out the self-testing activities and prepare individualized programs.
343 Modern Dance II (3) (1) Emphasis is placed on longer combinations and more complex, problem-solving themes. PREREQ: PED 215.
344 History of Dance (3) (2) Evaluation of dance as an art form in relation to man and his society. Physiological, sociological, and psychological implications; dance forms and types. Film and other materials focus on parallel developments in related arts.
◆ 345 Dance Production Workshop (3) (2) Study of the various elements of performance and dance production. All are integrated into a final performance that is created and directed by the students. Admittance is through auditions during the fall semester.
348 Instructional Skills for Aerobic Dance Fitness (2) (1) The purpose of this course is to teach various dance exercises, dance movements, and aerobic dance routines to music with the intent of promoting cardiovascular fitness and endurance, and improving muscle tone and coordination.
349 Advanced Social/Folk/Square Dance (3) (2) This course is designed to continue beyond the beginner level.
350 Teaching Physical Education in the Elementary Grades (6) (3) Students receive classroom theoretical and practical information and are assigned to elementary schools for teaching and observation with cooperating teachers and college supervisors. PREREQ: PED 100 and 243.
351 Evaluation in Health and Physical Education (3) (3) Selecting, administering, scoring, and evaluating tests of physical fitness, general motor ability, motor educability, and skill and knowledge.
352 Applied Exercise Physiology (3) (3) The application of physiological principles to physical education, exercise, and sport. PREREQ: BIO 259-269.
353 Organization and Administration of Physical Education, Health, and Athletics (3) (3) Principles of program building in curricular and extracurricular programs; organizing, administering, and supervising physical education, health, intramural, and interscholastic programs.
354 Elementary Physical Education Curriculum (3) (3) Constructing and evaluating the curriculum in elementary physical education. Progression and continuity along with developmental needs and interest of children are considered.
355 Accident Causation and Prevention (3) (3) Survey of safety education. History, philosophy, and psychology of accident prevention.
356 Critical Problems in the Highway Transportation System (3) (3) Techniques of assessing the knowledge, skill, and psycho-physical characteristics of a beginning driver; the relation of these to the safe operation of a motor vehicle.
360 Pathology of Special Physical Education and Therapeutic Recreation (2) (2) Considerations of the commonly seen disabling conditions with regard to anatomical and physiological changes.
361 Kinesiology (3) (3) Basic fundamentals of movement, articulation, and muscular actions; analysis of the related principles of mechanics. PREREQ: BIO 259-269.
362 Therapeutics for Special Physical Education and Therapeutic Recreation (3) (3) For students who want to specialize in adapted physical education or therapeutic recreation. To improve the students' understanding of evaluation and programming in the psychomotor domain for special populations. Principles of therapeutic exercise, and guidelines for exercise programs for those disabilities commonly seen in schools are presented. PREREQ: BIO 259 and 269, HEA 206, PED 251, 352, and 361, and PSY 100. Taken concurrently with PEL 362.

◆ This course may be taken again for credit

PEL 362 Therapeutics for Special Physical Education and Therapeutic Recreation Lab (3) (2) A course designed to give those students practical experience in those topics presented in PED 362. Taken concurrently with PED 362.

367 Arts and Crafts in Recreation (3) (3) Theoretical and practical applications of arts and crafts as recreational outlets for all age groups. Arts and crafts materials customarily found in school, camp, and community recreation programs are used.

368 Leadership in Recreation (3) (3) Basic concepts and leadership techniques are studied in various recreational settings. Opportunities for students to practice and develop their own techniques through work in community recreation agencies.

369 Principles of Recreational Outdoor Pursuits Education (3) (3) History, philosophical background, objectives, educational strategies, curriculum, safety considerations, and administration of an adventure-based, outdoor pursuits program.

370 Camp Counseling (3) (3) Theory and practice in camping and outing programs, approached from viewpoints of the camper, counselor, supervisor, specialists, and director.

371* Wilderness Adventure I (2) A course designed to provide the participant with a wilderness backpacking experience. This program utilizes the environment and adventure activities to develop self-confidence, camping and backpacking skills, concern for others, and a better understanding of the environment.

372* Wilderness Adventure II (2) This course is designed to provide the participant with an experiential outdoor pursuit with the bicycle as the primary mode of transportation. Students will tour through rural country learning biking and camping skills as they travel.

373* Wilderness Adventure III (2) This program is designed to offer adventure and learning in the white water river environment. The course is designed to instruct students in camping, and basic and white water canoe skills, and will culminate with a day wilderness river trip.

375 Outdoor Recreation (3) (3) The purpose of this course is to acquaint the student with the role outdoor recreation plays in today's society. The student will develop an appreciation for the outdoors through participation in outdoor recreation programs and learning skills necessary to participate in the program.

376 Recreational Games (3) (2) This course is designed to provide the student with the skills, techniques, and available resources involved in planning and directing recreational games. Instruction includes selection of games, activities, and opportunities for practical application of interested students.

377 Intramural and Recreational Sports (3) (3) A study of the basic ingredients required for administering successful intramural programs. The student serves in the intramural office and program as a student leader and supervisor. In addition, the student will study the rules, regulations, and policies of community sports with national headquarters and leadership.

◆ 378 Field Experience (3) (3) Practical experience for the student-designed concentration. Students must solicit approval of the appropriate agency, develop a proposal for the on-site experience, and secure agreement from the faculty adviser.

379 Therapeutic Recreation (3) (3) This course is designed to familiarize the student with that segment of the population having special needs. The course will combine lecture and hands-on experiences with as many of the different groups as possible in the settings they are found in the community. PREREQ: PED 251 and PED 257 or permission of instructor.

380 Women and Sport (3) (3) An examination of women's participation in sport from historical, cultural, psychological, physical, and legal perspectives; emphasis placed on women in sport in American society today.

385 Exercise, Play, and Development (3) (3) To understand human development throughout the lifespan from a physical, mental, social, and emotional viewpoint. To understand the role that exercise and play have in the development of the individual.

429 Electrocardiography and Stress Testing (3) Designed to prepare the prospective fitness instructor in exercise testing protocols as well as how to record, label, and calculate data with stress-testing exercise equipment and a standard, 12-lead electrocardiogram. PREREQ: BIO 259-269 and PED 352.

430 Planning Facilities for Athletics, Physical Education, and Recreation (3) (3) Management and planning of the facilities for athletics, school physical education, and recreational programs, playfields, playgrounds, buildings, and auxiliary structures as well as the maintenance of these facilities.

431 Physical Fitness Assessment and Exercise Program (3) (3) Designed to prepare students to assess the physical fitness levels of healthy but sedentary adults and prescribe individualized exercise programs. PREREQ: BIO 259 and 269, PED 351 and 352.

432 Exercise Techniques/Theory and Practice (3) (3) Analysis of various exercise techniques, and devices and systems emphasizing their use and safety. Clinical experience in strength and Range of Motion (ROM) testing and prescription. PREREQ: BIO 259 and PED 361.

433 Exercise and Stress Management (3) (3) Focuses on the use of exercise in the management of stress. The course includes exercise techniques that may be useful in alleviating stress.

434 Organization and Management of Adult Fitness Programs Clinic/Seminar (3) (3) Designed to provide students with practical experience in organizing and managing physical fitness programs for adults. PREREQ: BIO 259 and 269, PED 352, 361, 431, and 433.

435 Physical Fitness Specialist Internship (12) (6) (6) Experience working in a cardiovascular rehabilatory center or similar clinical setting under the supervision of qualified personnel for one-half semester. Practical experience in an adult physical fitness center under the supervision of qualified personnel for one-half semester. PREREQ: BIO 259 and 269, PED 352, 361, 431, and 433.

440 Movement Education in Elementary Physical Education (2) (2) Teaching techniques and subject matter for a program of movement education suitable for children. Designed to help children develop awareness of body and space in order to develop effective movement patterns.

441 Principles of Choreography (3) (1) The art of dance composition. Basic elements of space, rhythms, and motion dynamics. Students design original movement, progressing from simple to complex solo and group forms. PREREQ: PED 215.

443 Modern Dance III (3) (2) Advanced-level modern dance techniques with emphasis on all aspects of production: accompaniments, costume, sets, and lighting.

444 Organization and Management of Aquatic Facilities (3) (3) A study of the organization and administration of aquatic recreational areas, including ocean, natural fresh water, and man-made facilities. The student will acquire the skills and understandings necessary to develop aquatic programs and manage aquatic facilities. Offered spring semester only.

445 Dance/Movement for Special Groups (2) (2) Adaptation of dance movement with emphasis on methods, techniques, and activities suitable for special groups (elderly, disabled, mentally retarded, and special groups).

446 Repertory Performance (2) The purpose of this course is to offer dance students invaluable experience that can only be gained from performance. To ensure maximum benefit, the objectives are thorough studio rehearsal of dances, thorough lighting and staging rehearsals, and well-directed performances.

449 Learning on the Move (3) (3) A combination of movement education and perceptual motor theory and activities to help teachers and parents guide the children to maximum developmental potential. Preschool, nursery, and kindergarten ages.

450 High School Driver Education Program Management (3) (3) A study of the total safety program with emphasis on the teaching of safety. Each student prepares a practice lesson.

451 History and Philosophy of Health and Physical Education (2) (2) A study of past and present concepts of physical education; philosophy and principles of modern physical education programs.

452 Principles of Coaching (2) (2) Principles and methods of coaching sports in the school program.

453 Motor Learning (3) (3) A study of the theories of learning in relation to the acquisition of motor skills.

456 Introduction to the Driving Tasks (3) (3) An advanced course to prepare students to teach driver education in the secondary schools.

457 Psychosocial Aspects of Physical Disability (3) (3) A study of the psychological and social implications of physical disabilities. PREREQ: PSY 100 or equivalent, plus any basic course about the disabled person.

458 Physical Disabilities of Childhood (2) (2) A course designed for students in special education. Common orthopedic and neurological disabilities of childhood, especially chronic deviations. Emphasis is on understanding the medical aspects and problems of rehabilitation.

465 Mechanical Analysis of Motor Skills (3) A problem-solving approach to skill analysis using qualitative and quantitative video and amematographic analysis as well as elementary force-time and accelerometry techniques. Useful for teachers, trainers, coaches, and exercise professionals.

470 Leadership in Recreational Outdoor Pursuits (3) (3) This course is designed to provide instruction that would help persons desiring a career in recreational outdoor pursuits education, or develop an outdoor education or physical education program using activities, processes, and educational methodology in a safe and meaningful manner.

473 Independent Study and Special Projects (1-3) Provide an opportunity for selected students to pursue areas of special interest and tal-

* Additional fee required

◆ This course may be taken again for credit

ent or to take advantage of special conferences or seminars. PREREQ: Permission of department chairperson.

475 Mental Training in Sport (3) (3) Techniques of mental training for sport and physical activity, including relaxation training, concentration skills, breathing regulation, positive imagery, autogenic training, and meditation.

489 Student Teaching (6) Observation and participation in teaching situations in elementary, junior, and senior high schools under qualified cooperating teachers and college supervisors. PREREQ: PED 243, 350, 353, HEA 206, 306, extracurricular requirement, and updated medical examination.

490 Student Teaching (6) Observation and participation in teaching situations in elementary, junior, and senior high schools under qualified cooperating teachers and college supervisors. PREREQ: PED 243, 350, 353, HEA 206, 306, extracurricular requirement, and updated medical examination.

491 Internship (3-12) Interns will perform a variety of services to the agency. It is expected that interns will be involved in meaningful work projects during the placement with adequate time to interact with their work supervisors for questions, answers, and knowledge sharing. PREREQ: Acceptance of final student-designed concentration proposal.

492 Principles and Practices of Teaching (2) Deals with the professional preparation of the health and physical education teacher certification student. It is offered concurrently with the student teaching experience and is designed to assist the student in the public school setting. An examination of current problems and issues in the profession and in the schools leads to discussion of problem prevention and solution. Lectures on job procurement skills are included.

Department of Sports Medicine

Joseph Godek, *Chairperson*
Neil Curtis, *Coordinator of Athletic Training Education*
Sandra Fowkes Godek, *Coordinator of Sports Medicine Services*

ASSISTANT PROFESSORS: Curtis, Godek, Taylor

INSTRUCTORS: Fowkes Godek, Norris

ADJUNCT PROFESSOR: Ziegler

The Department of Sports Medicine offers three programs of study for students interested in careers in athletic training.

1. The B.S. in ATHLETIC TRAINING prepares students to achieve certification from the National Athletic Trainers Association Board of Certification, Inc. Students completing this major also are eligible for graduate study in such fields as physical therapy, exercise physiology, biomechanics, and sports medicine.
2. The AREA of SPECIALIZATION is designed for students enrolled in other programs of study, such as teacher certification. These students will complete courses in subjects fundamental to athletic training and will be eligible for certification by the National Athletic Trainers Association Board of Certification, Inc.
3. The SUMMER PROGRAM in ATHLETIC TRAINING is designed for students who are undergraduates at institutions that do not have an approved athletic training education program or post-graduate students seeking certification as an athletic trainer. Students in this program complete 13 credits of course work fundamental to the profession of athletic training during a nine-week summer session.

Pre-Physical Therapy

A student may follow several academic paths to prepare for a professional physical therapy program. There is no official pre-physical therapy curriculum at West Chester University. Students who are interested in preparing for a professional physical therapy school may meet the prerequisites either through the College of Arts and Sciences by enrolling in the Department of Biology, or through the School of Health Sciences by enrolling in the Department of Sports Medicine. Students also may elect to take their undergraduate degree in the College of Arts and Sciences in the Liberal Studies–Science and Mathematics Track with a biology minor. Students interested in pre-physical therapy should contact either Professor Joseph Godek in Sports Medicine or Dr. Judith Greenamyer in Biology.

BACHELOR OF SCIENCE—ATHLETIC TRAINING

1. General Education Requirements, see pages 35–39 — 51 semester hours
2. Athletic Training courses — 30 semester hours
   PED 271, SMD 272, 410, 411, 412, 413, 414, 415, 416, 417, 418, 454, and SML 361, 410, and 411
3. Related Requirements — 43 semester hours
   BIO 259 and 269; COM 101; HEA 201, 202, and 303; HEA 206 or PED 385; PED 352, 361, 452, and 453
   An advanced psychology and advanced biology elective and three credit hours of physical activity
4. Related Requirements that also satisfy the General Education Requirement — 27 semester hours
   BIO 110, CHE 103 and 104, CRL 103 and 104, MAT 105 or 121, PHY 130 and 140, and PSY 100
   Other courses in chemistry, physics, mathematics, and biology may be substituted with approval of program director.
5. Clinical Experience
   Clinical experiences are provided in a number of high school, college, and university settings. Students are assigned to assist faculty athletic trainers. Due to potential scheduling conflicts, athletic training students may be excluded from playing varsity sports during their four semesters of clinical experience.

AREA OF SPECIALIZATION IN ATHLETIC TRAINING — 47 semester hours

(Leads to eligibility for NATA certification)

Required: HEA 303, PED 271, SMD 272, 410, 411, 412, 413, 414, 415, 416, 417, 418, and 454, and SML 410 and 411

Summer Course Work in Athletic Training

Many students take the summer courses that are a part of the athletic training education program. The students are either undergraduates at colleges where there is no approved education program in athletic training, or they are graduate students seeking to qualify for the national certification exam. The course work offered in the summer will consist of those subjects that are fundamental to the profession of athletic training, i.e., SMD 410 and SML 410, SMD 411 and SML 411, and SMD 412 and 413. A total of 13 credits in a nine-week block will be offered.

Students interested in taking the summer session block of courses should contact the Coordinator of Athletic Training Education, West Chester University, West Chester, PA 19383.

SUMMER PROGRAM IN ATHLETIC TRAINING

SMD 410, 411, 412, and 413, and SML 410 and 411 — 13 semester hours

Facilities

Offices, classrooms, and laboratories for the Department of Sports Medicine are housed in the Health and Physical Education complex. Clinical experience is offered in two athletic training rooms on campus, one located in Hollinger Fieldhouse and the recently expanded facility located in the Health and Physical Education building. The athletic training rooms offer students the opportunity to work with state-of-the-art equipment, including numerous electronic modalities, a cybex isokinetic dynamometer, a Kincom, and the latest in proprioreceptive apparatus. In addition, the department maintains a close working relationship with the Human Performance Laboratory of the Department of Physical Education.

COURSE DESCRIPTIONS
SPORTS MEDICINE

Symbols: SMD; SML indicates a lab course. The first number in parentheses is the number of class hours per week; the second number indicates hours of credit.

272 **Athletic Training Techniques (3) (2)** A course designed to develop athletic training skills for beginning athletic training students. Offered in fall and spring semesters. PREREQ: PED 271.

SML 361 **Surface Anatomy Laboratory (2) (1)** Orientation to major anatomical landmarks and underlying structures. Required of athletic training majors. Offered in fall and spring semesters. PREREQ: BIO 259-269, PED 361, or concurrent with PED 361.

410 **Therapeutic Modalities for Athletic Training (3) (3)** Physical agents used in athletic training are presented with regard to the physics, physiological effects, indications, contraindications, and progression. Offered in the spring and summer semesters only. PREREQ: PED 352 and 361.

SML 410 **Therapeutic Modalities for Athletic Training Lab (2) (1)** Lab experiences in the application of physical agents presented in SMD 410. Offered in the spring and summer semesters only. PREREQ: SMD 410, or concurrently with SMD 410.

411 **Therapeutic Exercise for Athletic Training (3) (3)** The principles, objectives, indications, contraindications, and progression of various exercise programs used in the rehabilitation of athletic injuries are presented. Offered in the summer and fall semesters only. PREREQ: PED 352 and 361, and SML 361.

SML 411 **Therapeutic Exercise for Athletic Training Lab (2) (1)** Lab experiences in the application of exercises presented in SMD 411. Offered in the summer and fall semesters only. PREREQ: SMD 411, or concurrently with SMD 411.

412 **Pathology and Evaluation of Athletic Injury/Illness I (3) (3)** A presentation of the pathology of injuries to the extremities commonly seen in athletics and the techniques for their evaluation. Offered in summer and fall semesters only. PREREQ: PED 352 and 361, and SML 361.

413 **Pathology and Evaluation of Athletic Injury/Illness II (3) (2)** A continuation of SMD 412 with emphasis upon the head, neck, and trunk. PREREQ: SMD 412. Offered in summer and fall semesters only.

414 **History, Organization, and Administration of Athletic Training (2) (2)** A presentation of the historical and current perspectives of athletic training, including techniques for organizing and administering athletic training programs. Offered in the fall semester only.

415 **Athletic Injury Management I (2) (2)** Clinical experience of 200 or more hours with specific behavioral objectives in the management of illness, injuries of the lower extremity, and equipment fit. Offered in the fall semester only. PREREQ: SMD 411 and 412, and SML 411.

416 **Athletic Injury Management II (2) (2)** Clinical experience of 200 or more hours with specific behavioral objectives in athletic equipment selection and fit, and injuries, illnesses, and conditions as recommended by NATA guidelines. Offered in the spring semester only. PREREQ: SMD 410 and 413, and SML 410 and 411.

417 **Athletic Injury Management III (2) (2)** Clinical experience of 200 or more hours plus specific behavioral objectives for the management of neurological conditions and conditions of the head, neck, spine, and trunk, plus group discussions of clinical situations. Offered in the fall semester only. PREREQ: SMD 410, 411, 413, and 416; and SML 410 and 411.

418 **Athletic Injury Management IV (2) (2)** Clinical experience of 200 or more hours plus specific behavioral objectives for the management of conditions of the internal organs, systemic disorders, and the skin. Offered in the spring semester only. PREREQ: SMD 410, 411, 412, and 413; and SML 410 and 411.

454 **Theories and Practices of Conditioning and Training (2) (2)** A course to help equip the student to design and manage year-round conditioning programs for athletes. PREREQ: PED 352 and 361.

School of Music

Mary Anne Rees, *Dean*

PROFESSORS: Bedford, Belmain, Friday, Laudermilch, McVoy, Murray, Nelson, Pennington, Schick, Schmidt, Sullivan, Veleta, Voois

ASSOCIATE PROFESSORS: Ahramjian, Aliferis, Alt, Burton, Dorminy, Guidetti, Hegvik, Klein, Ludeker, Newbold, Pandel, Price, Southall, Sprenkle, Wagner

ASSISTANT PROFESSORS: Balthazar, Blair, Briselli, Chilcote, Grabb, Hershey, Lyons, Maggio, Markey, McHugh, Metcalf, Nally, Popovic, Pippart, Richmond, Richter, Winters, Wyss

INSTRUCTORS: Cullen, Galante, McKenna, Paulsen, Turk, Villella

MUSIC TESTS — BACHELOR OF SCIENCE IN MUSIC EDUCATION

1. Each candidate must demonstrate skill in at least one performing medium in which he or she excels: piano, organ, voice, guitar, or a band or orchestra instrument. It is preferable, although not required, for pianists and vocalists to perform at least part of their audition from memory.
2. All candidates are tested in voice and piano.
3. Piano, organ, or voice majors with band or orchestra instrument experience are urged to demonstrate their ability on their instruments.

NOTE: All candidates must bring music for the vocal, piano, and instrumental compositions they intend to perform, and should come prepared with a song that will demonstrate vocal range and quality.

MUSIC TESTS — BACHELOR OF MUSIC

Each candidate in performance must demonstrate an advanced level of proficiency in the major area of performance as evidenced by the ability to perform compositions representing a variety of musical periods and must show potential as a professional performer. Memorization is required for pianists and vocalists. Each candidate in theory and music history must demonstrate an acceptable background in a major performing area. Candidates in composition must take a sight-singing test in addition to the piano and voice tests and demonstrate an acceptable background in a major performing medium; they also must present scores of completed compositions.

NOTE: Candidates for the B.M. degree will also take all of the tests required for admission to the B.S. program. Depending on the outcome of the aural perception tests (required of all candidates), students in any music degree program may be required to take a remedial course in ear training (MTC 014), which must be passed with a grade of C or better. Refer to "Repeat Policy on Remedial Courses."

REQUIREMENTS COMMON TO ALL MUSIC PROGRAMS

1. General Requirements, see pages 35–39 38-50 semester hours
2. Theory Requirements 20 semester hours
   MTC 112, 113, 114, 115, 212, 213, 214, and 215
3. Music History Requirements 6 semester hours
   MHL 221 and 222
4. Recital Attendance

BACHELOR OF SCIENCE—MUSIC EDUCATION

The B.S. in MUSIC EDUCATION is a balanced program of general, specialized, and professional courses leading to qualification for a Pennsylvania Instructional I Certificate to teach music in the elementary and secondary schools of Pennsylvania. Three teaching concentration programs—general, instrumental, and vocal-choral—are provided. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general, music, and concentration requirements.

1. Required Music Education Courses 20-23 semester hours
   MUE 331, 332 (333, 335, 337 depending on area of concentration), 431, and 432
2. Other Music Requirements 46-59 semester hours
   Major performing instrument, applied music courses, conducting, music organizations, MTC 450, and music electives
3. Education Courses 6 semester hours
   EDF 100 and EDP 250

BACHELOR OF MUSIC

There are five concentrations available in the Bachelor of Science in Music—compositions, theory, music history, performance (instrumental, keyboard, or vocal), and jazz studies and contemporary media. The requirements for each concentration are listed below.

REQUIREMENTS COMMON TO B.M. PROGRAMS

Foreign Language 6-12 semester hours

The B.M. in COMPOSITION offers comprehensive theory and composition courses designed to develop creative skills enabling the student to write in an acceptable contemporary idiom and to develop an individual style. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.

1. Required Composition Courses 24 semester hours
   MTC 312, 313, 341, 344, 412, 413, 417; and 342 or 346
2. Other Music Requirements 38 semester hours
   MHL elective, conducting, music organization, music electives, performance area, and MTC 450

The B.M. in THEORY offers extensive training to develop analytical skills leading to the comprehension of the structure and form of music of all styles and periods, and to develop acceptable writing skills. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.

1. Required Theory Courses 21 semester hours
   MTC 312, 341, 342, 344, 346, 417, and 479
2. Other Music Requirements 38 semester hours
   MTC 450, MHL elective, conducting, performance area, music organizations, and music electives

The B.M. in MUSIC HISTORY prepares the student for graduate studies in music history and literature, and musicology. The required courses provide a broad foundation in the major field.

The wide choice of music electives permits the student to structure a program compatible with his or her particular career goals and interests. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.

1. Required Music History Courses — 15 semester hours
   MHL 440, 441, 442, 443, 444, 445 (select four of the six), and MHL 470
2. Music History Electives — 12 semester hours
3. Music Electives — 12 semester hours
4. Other Music Requirements — 13 semester hours
   MTC 342, applied music, conducting, music organization

The B.M. in PERFORMANCE is for students who demonstrate a high degree of ability on their chosen instrument and who desire to concentrate on developing that ability. Majors in the program should consult the "Handbook for Students in Music—Undergraduate Division" for the current general and music requirements.

1. BACHELOR OF MUSIC—INSTRUMENTAL PERFORMANCE
   Required Instrumental Courses — 38-40 semester hours
   Major instrument 141, 142, 241, 242, 341, 342, 441, 442; AIC 311, 312; band/orchestra; and master class/ensemble
   Other Music Requirements — 29 semester hours
   MTC 341, 344, and 450, secondary applied music, major literature course, and music electives
2. BACHELOR OF MUSIC—KEYBOARD PERFORMANCE
   Optional 1 (Performance)
   Required Keyboard Courses — 40 semester hours
   PIA 141, 142, 241, 242, 341, 342, 405, 406, 425, 426, 441, 442, and 450 or 452
   Other Required Music Courses — 29 semester hours
   MTC 344, MHL electives, conducting, secondary performance area, music organizations, music electives, and master class/ensemble
   Option 2 (Performance with Pedagogy emphasis)
   Required Keyboard Courses — 48 semester hours
   PIA 141, 142, 241, 242, 341, 342, 405, 406, 425, 426, 441, 442, 450, 452, and 451 or 453
   Other Required Music Courses — 20 semester hours
   MHL or MTC elective, supportive elective, conducting, secondary performance area, music organizations, and master class/ensemble
3. BACHELOR OF MUSIC—VOCAL PERFORMANCE
   Required Vocal Courses — 44 semester hours
   VOI 141, 142, 241, 242, 329, 341, 342, 411, 412, 413, 414, 424, 441, and 442; vocal literature course; VOC 311 and 312
   Other Music Requirements — 24 semester hours
   MTC 344 and 450; keyboard courses; music electives; chorus

The B.M. in JAZZ STUDIES AND CONTEMPORARY MEDIA is designed for students who want to develop their performance abilities in today's rapidly changing musical scene. The program is thoroughly rooted in traditional music. Consult the "Handbook for Students in Music—Undergraduate Division" for the current general and music requirements.

1. Required Jazz Courses — 27 semester hours
   AJZ 321, 331, 361, 362, 365; MHL 322; MTC 261, 271, 341, 361, 362
2. Major Instrument — 16 semester hours
3. Other Music Requirements — 15 semester hours
   Conducting, music electives, music organizations, jazz ensembles, and jazz electives

Minor in Music — 18-21 semester hours

This program is geared toward liberal arts students with an interest in music. The "Handbook for Students in Music—Undergraduate Division" should be consulted for current requirements.

1. Required Courses — 12 semester hours
   MTC 112 and 114, MHL course, music organization, and PIA 191 and 192
2. Music Electives — 6-9 semester hours

Minor in Jazz Studies — 18-21 semester hours

This program is designed primarily for students currently enrolled in a music degree program. Students in other degree programs will be admitted if qualified. Students must have the permission of both their major adviser and the chairperson of the Instrumental Department. The "Handbook for Students in Music—Undergraduate Division" should be consulted for current requirements.

1. Required Courses — 18 semester hours
   AES 151, 152; AJZ 361, 362, 365; MHL 322; MTC 361, 362
2. Music Electives — 0-3 semester hours
   ACP 193; AEO 121; AES 151, 152

Minor in Music History — 18 semester hours

This program is designed primarily for students currently enrolled in a music degree program. Students in other degree programs will be admitted if they qualify. Students must have the permission of both their major adviser and the chairperson of the Department of Music History. The "Handbook for Students in Music—Undergraduate Division" should be consulted for current requirements.

Required Courses

Any three of the following six courses—MHL 440, 441, 442, 443, 444, and 445

Any two of the following genre or composer courses—MHL 320, 322, 451, 454, 455, 456, 457, 458, 460, 461, 462; and MTC 342

Department of Music Education

Carol A. Belmain, *Chairperson*

FACULTY: Burton, Ludeker, Markey, Pippart, Richmond, Villella

COURSE DESCRIPTIONS
MUSIC EDUCATION

Symbol: MUE

231 Music for the Classroom Teacher (3) Designed to equip the elementary classroom teacher to participate in a music program. Emphasis on teaching procedures and materials.

232 Music in Early Childhood (3) Designed to equip the teacher of early childhood to develop specific concepts utilizing singing, rhythmic, and melodic activities. Emphasis on listening and movement to music.

233 Handbells (1) Selection of music; care of bells; maintenance of library; programming; styles; history of bells; bell assignments; performance practice; performance.

331 The Music Curriculum, K-6: Methods and Materials (3) The study of music and the learning process at the elementary level. The listening program, pedagogy for the elementary music program, and materials. See note below.

332 The Music Curriculum, 7-12: Methods and Materials (3) The study of music and the learning process at the secondary level. The listening program, the middle and junior high school general music programs, ethnomusic, programs and performances, basics of administration, related arts, the music major program, and evaluative techniques. See note below.

333 Instrumental Methods (3) Fundamentals underlying the development of instrumental programs in the public schools. Emphasis on program organization and administration, teaching procedures, and materials.

NOTE: MUE 331 must be completed successfully before MUE 332. The sequence for these REQUIRED music education courses is consecutive semesters: MUE 331 followed by MUE 332 and then MUE 431/432 the following semester. Enrollment for these courses is limited on a yearly basis and is planned at a meeting for sophomores in the spring semester. SEE DEPARTMENT CHAIRPERSON. MUE 333 is scheduled during the semester with MUE 332.

335 Choral Materials and Practices (2) Designed to acquaint the student with a variety of choral music suitable for school use. Program building and rehearsal techniques are demonstrated. Offered in fall semester only.

337 Instrumental Techniques and Materials (2) For juniors and seniors who desire to specialize in instrumental music. Considers rehearsal procedures, effective materials, minor repairs of instruments, competitions and festivals, and marching band procedures. Offered in spring semester only. PREREQ: MUE 333.

338 Comprehensive Musicianship/Leadership Training in Music Education (2) A course designed to help future professionals develop leadership qualities and pragmatic instructional skills. Motivational strategies as advocated by leading authorities will be emphasized. Content includes visionary leadership, time management, and principles in self-discipline, self-confidence, and problem solving. Teaching assignments will include methodologies in comprehensive musicianship and a variety of teacher/leader concepts.

412 Teaching Music Listening at the Elementary Level (3) The teaching of the elements of music, musical concepts, and the development of aesthetic sensitivity through listening.

422 Music in the Middle School (3) Review and critical analysis of music education in the middle school: philosophies, curriculum, practices, and personnel.

423 Elementary Orff Techniques (3) Basic Orff melodic and rhythmic techniques for the elementary classroom. Emphasis on developing concepts for individual teaching situations. PREREQ: MUE 331 and 332.

425 Elementary Kodaly Techniques (3) Basic Kodaly techniques. Adaptation of teaching procedures for elementary school: rhythm, melody, movement, and improvisation.

428 Music in Special Education (3) Characteristics of special pupils; adaptation of teaching techniques, materials, and curriculum. PREREQ: MUE 231, 232, or 331.

430 Related Arts Pedagogy in Music Education (3) Principles of related-arts teaching applicable to musical elements, art, and creative movement, with appropriate teaching techniques at specified grade levels. Materials for school music programs; basal music series, other texts and literature, and resources in related arts. Demonstration lessons and unit planning.

431 Student Teaching (Elementary) (6) Observation and participation in teaching vocal and instrumental music at the elementary level. Undertaken in conjunction with qualified cooperative teachers. Professional conferences and visitations are an integral part of the experience. PREREQ: See 432.

432 Student Teaching (Secondary) (6) Observation and teaching general, vocal, and/or instrumental music at the secondary level. Professional conferences and visitations are an integral part of the experience. PREREQ for 431/432: Satisfy requirements under "Admission to Teacher Education." GPA 2.50. Grades of C or better in required methods classes and final required keyboard minor and voice minor. Complete music theory and aurals, music history, conducting, and all instrument classes. Completion of 96 semester hours including the required music theory, aural activities, music history, conducting, and all professional education courses.

Department of Music History

Sterling E. Murray, *Chairperson*

FACULTY: Balthazar, Price, Schmidt, Winters

COURSE DESCRIPTIONS
MUSIC HISTORY

Symbol: MHL

121 Fine Arts (Music) (3) Designed for the general requirements. An introductory course in the history and appreciation of music from the Middle Ages through the contemporary period. Not open to music majors.

NOTE: Other courses are available to the nonmusic major for general requirements. Particularly suitable is MHL 125.

125 Perspectives in Jazz (3) For nonmusic majors. Guided listening to improve understanding and enjoyment of jazz with emphasis on jazz heritages, chronological development, and sociological considerations, culminating in an analysis of the eclectic styles of the 1960's and 1970's. Not open to music majors.

◆ 179 Special Subjects Seminar (3) Significant topics in music history and literature presented by faculty members and/or visiting lecturers. Designed for the nonmusic major who has had little or no previous musical experience. Fulfills the general requirements. Not open to music majors.

#201 Form and Style in the Arts (3) Relationships between the arts (music, literature, fine arts, and dance) stressed through common principles of form and style. Concentration on the development of skills of critical perception through practical application with reference to various arts. Fulfills the interdisciplinary requirement.

221 Music History I (3) A history of music from earliest known times through the Baroque Period. Analysis of styles, forms, aesthetic concepts, and practices. PREREQ for music majors: MTC 113. For nonmusic majors: permission of instructor.

◆ This course may be taken again for credit.
Approved interdisciplinary course.

222 **Music History II** (3) A history of music from Classical through Contemporary Periods. Analysis of styles, forms, aesthetic concepts, and practices. PREREQ for music majors: MHL 221. For nonmusic majors: permission of instructor.
◆ 310 **Collegium Musicum** (1) A chamber ensemble specializing in the use of authentic instruments and performance techniques in the music of the Medieval, Renaissance, and Baroque eras. Membership by audition.
320 **World Music** (3) An introduction to the study of tribal, folk, popular, and oriental music and ethnomusicology methodology. Open to music majors and nonmusic majors without prerequisites.
322 **History of Jazz** (3) A survey of the history of jazz, including representative performers and their music. PREREQ: MHL 221 and 222, or permission of the instructor.
323 **Women in Music** (3) A survey of the role that women played in the history of music from the Middle Ages to the present. Open to nonmusic majors with permission of instructor.
440 **Medieval Music** (3) Development of plainsong and secular monody and beginnings of early history of polyphony through the 14th century. Consideration of trends in the visual arts, history, and literature. PREREQ: MHL 221 and 222, or permission of instructor.
441 **Renaissance Music** (3) Sacred and secular music in the age of Dufay; changing forms and styles through the music of Franco-Flemish groups; the frottola and related forms; Palestrina and his contemporaries, with a brief consideration of trends in the visual arts, history, and literature. PREREQ: MHL 221 and 222, or permission of instructor.
442 **Baroque Music** (3) Styles and forms of Baroque repertoire; contributions of the major Baroque composers; role of music and musicians in the society of the period. PREREQ: MHL 221 and 222, or permission of instructor.
443 **Late 18th-Century Music** (3) Changing styles and forms by the sons of J.S. Bach; the Viennese preclassicists; the Mannheim school; opera; Joseph and Michael Haydn, Mozart, and their contemporaries; the early works of Beethoven. PREREQ: MHL 221 and 222, or permission of instructor.
444 **19th-Century Music** (3) Historical developments during the Romantic Period (ca. 1800-1900). Analysis of changes and trends; comparative aspects of new forms. PREREQ: MHL 221 and 222, or permission of instructor.
445 **20th-Century Music** (3) Trends in modern music from about 1900 to the present. Analysis and listening experience. PREREQ: MHL 221 and 222, or permission of instructor.
451 **Music in the United States** (3) Survey of the development of music and musical styles from 1620 to the present. Analysis of styles, forms, aesthetic concepts, and practices. PREREQ: MHL 221 and 222, or permission of instructor.
454 **History of Opera** (3) A basic course in the origin and development of opera and its dissemination throughout the Western world. PREREQ: MHL 221 and 222, or permission of instructor.
455 **History of Orchestral Music** (3) A study of representative orchestral works: symphonies, concerti, suites, overtures, and others, from the Baroque Period to the present. PREREQ: MHL 221 and 222, or permission of instructor.
456 **History of Musical Instruments** (3) The development of musical instruments from antiquity to the present. A world view of instruments will include function and performance practice.
458 **Performance Practices** (3) A consideration of the special problems encountered in the stylistic realization and performance of music from the Medieval through the Romantic eras. Particular attention will be focused on original sources, period instruments, and performance practices. PREREQ: MHL 221-222, or permission of instructor.
460 **Bach and His Works** (3) The life of J.S. Bach; works for organ, keyboard, and other instruments; cantatas and larger choral works. PREREQ: MHL 221 and 222, or permission of instructor.
461 **Beethoven and His Works** (3) The life and times of Ludwig van Beethoven; consideration of orchestral, chamber, and vocal music, emphasizing chronological stylistic development; consideration of Beethoven's influence on the later 19th century. PREREQ: MHL 221 and 222, or permission of instructor.
462 **Mozart and His Works** (3) A study of the life and music of Wolfgang A. Mozart with special reference to the period in which he lived. PREREQ: MHL 221 and 222, or permission of instructor.
470 **Research in Music History** (3) Basic bibliographical material, library resources, and research techniques, applicable to undergraduate study in music history and literature. Required of B.M. majors in music history. Open to others with permission of instructor and department chairperson.
◆ 479 **Seminar in Music History I** (1-3) Significant topics presented by faculty members and/or visiting lecturers. Designed to meet specific needs of undergraduate music majors.
◆ 480 **Seminar in Music History II** (1-3) Significant topics presented by faculty members and/or visiting lecturers. Designed to meet specific needs of undergraduate music majors.
◆ 481 **Independent Study** (1)
◆ 482 **Independent Study** (2)
◆ 483 **Independent Study** (3)
MHW 401-410 **Workshops in Music History** (1-3) Participation-oriented workshops designed to meet specific needs in music history and to develop skills for practical application in teaching and professional settings.

◆ This course may be taken again for credit.

Department of Instrumental Music

Henry Grabb, *Chairperson*

FACULTY: Ahramjian, Briselli, Cullen, Fitz, Galante, Guidetti, Hegvik, Klein, Laudermilch, Lyons, McKenna, Metcalf, Meyer, Newbold, Paulsen, Richter, Southall, Villella

COURSE DESCRIPTIONS
INSTRUMENTAL MUSIC
NUMBERING SYSTEM

Private and class lessons given by the Department of Instrumental Music are shown by the following numbers, together with the appropriate prefix:

BAR	Baritone
BAS	Bass
BSN	Bassoon
CLT	Clarinet
FLU	Flute
FRH	French Horn
GTR	Guitar
HRP	Harp
JBR	Jazz Brass
JPR	Jazz Percussion
JST	Jazz Strings
JWW	Jazz Woodwinds
OBO	Oboe
PER	Percussion
SAX	Saxophone
TBA	Tuba
TPT	Trumpet
TRB	Trombone
VCL	Cello
VLA	Viola
VLN	Violin

101-402 Private instruction in minor performance area (1)
111-412 Private instruction in major performance area (2)
141-442 Private instruction in advanced performance area, B.M. Program (3)
INS 471-474 Advanced Instrumental Lesson (2) (Elective)
AIM 311 Marching Band Techniques (1) A survey of the function of the total marching band and of each component within it.
AJZ 321 Recording Techniques (2) A study of the technology of the modern recording sound studio.
AJZ 331 Electronic Instruments (2) A study of the MIDI implementation of synthesizers, samplers, sequencers, signal processors, and rhythm processors as related to real-time performance.

AJZ 361 Jazz Musicianship and Improvizsation I (3) A basic course in jazz improvisation that emphasizes the learning and discovery of improvisational techniques through playing and listening.
AJZ 362 Jazz Musicianship and Improvisation II (3) A continuation of AJZ 361.
AJZ 365 Jazz Ensemble Techniques (1) Techniques and methods for organizing, rehearsing, programming, and operating jazz ensembles.
◆ AWM 429 Special Subjects Seminar—Instrumental (1-2-3) Topics in the area of instrumental music presented by faculty members and/or visiting specialists.

ALC A Literature Class A historical survey of the music written for instrumental solo and ensemble, including current teaching materials.
ALC 311 Brass Literature (3)
ALC 331 String Literature (3)
ALC 336 Guitar Literature (1)
ALC 337 Guitar Literature II (1)
ALC 341 Woodwind Literature (3)

AMC A Master Class Solo and ensemble instrumental repertoire is performed and critiqued by the teacher and students.
◆ AMC 311-314 Master Class Brass (1)
◆ AMC 321-324 Master Class Percussion (1)
◆ AMC 331-334 Master Class Strings (1)
◆ AMC 341-344 Master Class Woodwinds (1)

ACB A Class in Brass (at the beginning level)
ACB 191 Trumpet Class (½)
ACB 192 French Horn Class (½)
ACB 193 Trombone Class (½)
ACB 194 Brass Class (½)

ACP A Class in Percussion (at the beginning level)
ACP 191 Percussion Class (Drums) (½)
ACP 192 Percussion Class (Mallets) (½)
ACP 193 Drum Set Class (½)

ACS A Class in Strings (at the beginning level)
ACS 191 Violin Class I (1)
ACS 192 Violin Class II (1)
ACS 193 Viola Class (½)
ACS 194 Cello Class (½)
ACS 195 Bass Class (½)
ACS 196 Guitar Class (½)

ACW A Class in Woodwinds (at the beginning level)
ACW 191 Clarinet Class (½)
ACW 192 Flute Class (½)
ACW 193 Double Reed Class (½)
ACW 194 Woodwind Class (½)

AEB An Ensemble: Band
◆ AEB 101 Elementary Band (½)
◆ AEB 112 Marching Band Front (1)
◆ AEB 311 Marching Band (1)
◆ AEB 321 Concert Band (1)
◆ AEB 331 Symphonic Band (1)
◆ AEB 341 Wind Ensemble (1)

AEO An Ensemble: Orchestra
◆ AEO 101 Elementary Orchestra (½)
◆ AEO 111 Chamber Orchestra (½)
◆ AEO 121 Studio/Pit Orchestra (½)
◆ AEO 331 Chamber Orchestra (1)
◆ AEO 341 Symphony Orchestra (1)

AES An Ensemble: Small
◆ AES 111 Brass Ensemble (½)
◆ AES 121 Percussion Ensemble (½)
◆ AES 131 String Ensemble
◆ AES 141 Woodwind Ensemble (½)
◆ AES 151 Jazz Ensemble (Criterions) (½)
◆ AES 152 Jazz Ensemble (Combo) (½)

AIC A Class in Instrumental Conducting
AIC 311 Instrumental Conducting I (2)
AIC 312 Instrumental Conducting II (2)
PREREQ: AIC 311 or VOC 311

◆ This course may be taken again for credit

Department of Keyboard Music

Shirley Pethes Aliferis, *Chairperson*

FACULTY: Bedford, Blair, Pandel, Pennington, Schick, Veleta, Voois

COURSE DESCRIPTIONS KEYBOARD MUSIC

NUMBERING SYSTEM

Private and class lessons given by the Department of Keyboard Music are shown by the following numbers, together with the appropriate prefix: HAR–Harpsichord, PIA–Piano, ORG–Organ

191-192 Class instruction in minor performance area (1)
◆100 Private elective instruction (1)
101-402 Private instruction in minor performance area (1)
103-104 Private instruction in minor performance area, B. M. in history program (1)
105-106 Private instruction in minor performance area, elementary education students with a concentration in music (1)
107-109 Private instruction in a major performance area, elementary education students with a concentration in music (1)
111-412 Private instruction in major performance area, music education program (2)
413 Elective credit for senior recital, accompanying, or other participation in concerts or recitals, or extra study of literature. Available to music education seniors only during the non-student-teaching semester by permission of the department (1)
141-442 Private instruction in advanced performance area, B.M. program (3)
471-474 Advanced Keyboard Lesson (2) (Elective)
PIA 403 Harpsichord and Continuo Realization (1) An introduction to harpsichord playing and the principles of continuo accompaniment as a Baroque style.
◆ MAK 311-314 Master Class (Keyboard) (1) For keyboard majors. Experience in performing memorized literature. Class members also play two piano compositions and ensemble music for piano and other instruments.
ORG 351 Organ Literature I (3) A survey of literature for the organ from the 13th century to the Baroque period; influence of the organ on the literature.
ORG 352 Organ Literature II (3) A survey of literature for the organ from J. S. Bach to the present; influence of the organ on the literature. Recordings and performances by organ majors will be evaluated.
ORG 451 Accompanying (3) Performance of the vocal and instrumental accompanying literature for organ from all periods; performance and reading sessions.
ORG 452 Service Playing (3) A study of problems in service playing for the organist. Included will be hymn accompaniment, improvisation, conducting from the organ, and literature for the service.
◆ PIA 213 Studio Lessons in Accompanying (1) Studio instruction in accompanying for pianists in any music program.
◆ PIA 250 Accompanying, Ensemble, and Sight Reading (1) Class instruction in accompanying, ensembles, and sight reading.
PIA 404 Transposition and Score Reading (2) Emphasizing the needs of the keyboard accompanist, techniques include clef reading, harmonic analysis, interval transposition, solfege steps, and enharmonic changes.
PIA 405 Accompanying—Vocal (3) Performance of the vocal accompanying literature from all periods; performance and reading sessions in class.
PIA 406 Accompanying—Instrumental (3) Performance of the instrumental accompanying literature from all periods; emphasis on the sonata literature; performance and reading sessions in class.
PIA 410 Independent Studies in Keyboard Music (1-3) Special research projects, reports, or readings in keyboard music. Permission of department chairperson required.
PIA 423 Baroque Keyboard Literature (3) The Renaissance through development of variation form and dance suite. Performance practices, ornamentation, and figured bass. In-depth study of works of Handel, Bach, and Scarlatti. Some student performance required.
PIA 424 Classical Piano Literature (3) Origin and development of the sonata and performance

◆ This course may be taken again for credit.

practices of homophonic style. Music of Bach's sons, Haydn, Mozart, and Beethoven. Some student performance required.
PIA 425 Romantic Piano Literature (3) Analysis of piano styles of Schubert, Chopin, Mendelssohn, Schumann, Liszt, Brahms, Faure, and Tchaikovsky. Performance practices. The virtuoso etude and problems of technical execution. Some student performance required.
PIA 426 20th-Century Piano Literature (3) Seminal works and styles of this century. Albeniz, Rachmaninoff, Debussy, Ravel, Prokofiev, Hindemith, Schoenberg, Bartok, and American composers. Some student performance required. PREREQ: MTC 213.
PIA 427 The Concerto (3) A chronological presentation of the development of the piano concerto emphasizing performance practices and problems. PREREQ: MTC 213.
PIA 429 Special Subjects Seminar (1-3) Significant topics presented by faculty members and/or visiting lecturers. Designed to meet the specific needs of undergraduate keyboard majors.
PIA 450 Group Piano Pedagogy I (4) Procedures and materials for group piano instruction from preschool through beginning levels. Emphasis on developing musical literacy and creativity through peer learning and group interactions. Includes practicing in group piano instruction.
PIA 451 Group Piano Pedagogy II (4) Procedures and materials for group instruction from the intermediate through advanced levels. Emphasis on developing comprehensive musicianship through an interwoven study of literature, musical analysis, technique, improvisation, ear training, harmony, transposition, and sight reading. Includes practicum in group piano instruction. PREREQ: PIA 450.
PIA 452 Piano Pedagogy I (4) An in-depth study of repertoire and materials available to the studio piano teacher for the beginning and intermediate levels. Discussions of related concerns such as memorization, practice techniques, developing technique through literature, principles of fingering, and sight reading. Includes practicum in individual instruction.
PIA 453 Selected Topics in Piano Pedagogy (4) Further exploration of the goals and objectives of piano study through presentation of selected topics and continued practicum in individual instruction.

Department of Music Theory and Composition

James McVoy, *Chairperson*

FACULTY: Hershey, Maggio, Nelson, Popovic, Sullivan

COURSE DESCRIPTIONS
MUSIC THEORY AND COMPOSITION

Symbol: MTC

014 Basic Dictation and Sight Singing (2) A preparatory course for music majors emphasizing basic aural perception and sight-singing skills needed for effective music study. A final grade of C or better is a prerequisite for taking MTC 114.
110 Fundamentals of Music (3) A study of basic elements of music for those without previous musical experience. For nonmusic majors only.
112 Theory of Music I (3) Introduction to music theory, music writing, and keyboard harmony. Elements of musical form; binary and ternary forms. Primary triads and their inversions. Analysis and creative activity.
113 Theory of Music II (3) Supertonic and other secondary triads and their inversions; diatonic seventh chords; modulation; compound ternary, rondo, and variation forms. Analysis and creative activity. PREREQ: MTC 112.
114 Aural Activities I (2) Development of basic hearing skills, chiefly through sight singing and dictation activities based on the subject matter of MTC 112.
115 Aural Activities II (2) Continued development of basic hearing skills. PREREQ: MTC 114.
212 Theory of Music III (3) Diatonic and chromatic seventh chords and their inversions. Modulation. Invention and fugue, sonata-allegro forms. Analysis and creative activity. PREREQ: MTC 113.
213 Theory of Music IV (3) Harmonic and contrapuntal techniques of the 20th century. Form in contemporary music. Analysis and creative activity. PREREQ: MTC 212.
214 Aural Activities III (2) Material of advanced difficulty involving chromatic alteration, foreign modulation, and intricate rhythms. PREREQ: MTC 115.
215 Aural Activities IV (2) Continuation of MTC 214 and activities involving nontonal music. PREREQ: MTC 214.
261 Fundamentals of Jazz (2) A basic course in jazz theory.
271 Radio and Television Music (2) Techniques used in composing and arranging music for radio and television; practical writing experience.
312 Composition I (3) Creative writing in the forms, styles, and media best suited to the capabilities and needs of the student. PREREQ: MTC 212.
313 Composition II (3) Further application of MTC 312, stressing contemporary techniques. PREREQ: MTC 312.
341 Orchestration (3) The orchestra; use of instruments individually and in combination. PREREQ: MTC 212.
342 Musical Form (3) The standard forms of tonal and contemporary music. PREREQ: MTC 212.
344 Counterpoint I (3) The contrapuntal techniques of tonal music. Chorale prelude and invention. PREREQ: MTC 212.
345 Counterpoint II (3) Advanced contrapuntal forms including canon and fugue. PREREQ: MTC 344.
346 Techniques of Early 20th-Century Music (3) A study of compositional techniques in representative vocal and instrumental works of the first two decades of the century.
361 Jazz Harmony and Arranging I (3) A basic course in jazz/popular harmony and arranging techniques, including contemporary chord symbols and terminology, and basic voicing for brass, reed, and rhythm sections.
362 Jazz Harmony and Arranging II (3) An intermediate course in jazz/popular harmony and arranging techniques, including more advanced harmonic techniques. Writing for strings, woodwinds, and electronic instruments is introduced.
364 Performance Practices in Contemporary Music (3) Technical problems of understanding new notation (e.g., graphic, proportional, multiphonics, microtones, metric modulation, asymmetrical rhythm groupings, prose scores, etc.) and facility in performing scores that include these techniques. PREREQ: MTC 213 or permission of instructor.
412 Composition III (3) Composition in larger forms. Open to composition majors only. PREREQ: MTC 313.
413 Composition IV (3) Advanced composition involving major projects in a contemporary idiom. PREREQ: MTC 412.
415 Serialism and Atonality (3) Compositional procedures and theoretical concepts in atonal and serial works of Schoenberg, Berg, Webern, Bartok, Stravinsky, and more recent composers. PREREQ: MTC 213.
416 Jazz Practices (2-3) Jazz history, writing, and performance. Survey of basic jazz literature; fundamental techniques in arranging and improvising. PREREQ: MTC 213 or equivalent.
417 Electronic Music (3) Materials and techniques of electronic music and their use in composition. Laboratory experience in the composition of electronic music. PREREQ: MTC 312 or permission of instructor.
450 Acoustics of Music (3) The study of sound; its production, transmission, and reception. Musical instruments, the acoustics of rooms, and the physical basis of scales.
◆ **MTC 479 Seminar in Music Theory (3)** Special topics seminar designed to meet specific needs of undergraduate music majors.
◆ **MTC 481 Independent Study (1)**
◆ **MTC 482 Independent Study (2)**
◆ **MTC 483 Independent Study (3)**

◆ This course may be taken again for credit.

Department of Vocal and Choral Music

David Sprenkle, *Chairperson*

FACULTY: Alt, Chilcote, Dorminy, Friday, Nally, Wagner, Wyss

COURSE DESCRIPTIONS
VOCAL AND CHORAL MUSIC
NUMBERING SYSTEM

Private lessons given by the Department of Vocal and Choral Music are shown by the following numbers, together with this prefix:
VOI-Voice

◆ 100 Private instruction for nonmusic majors. Permission of the chairperson required (1)
101-402 Private instruction in minor performance area (1)
111-412 Private instruction in major performance area, Music Education program (2)
141-442 Private instruction in advanced performance area, B.M. program (3)
471-474 Advanced Voice Lesson (2) (Elective)
151-452 Private instruction in minor performance area, B.A. Theatre: Musical Theatre (1)
161-462 Private instruction in major performance area, B.A. Theatre (2)
◆ CHO 112 University Chorale (1) A chorus presenting a wide selection of choral music for mixed voices. Open to all students.
◆ CHO 211 Men's Chorus (1) A sophomore chorus presenting the choral literature for male voices. Open to men in all curricula. Not regularly offered
◆ CHO 212 Women's Chorus (1) A sophomore chorus presenting the choral literature for female voices. Open to women in all curricula. Not regularly offered.
◆ CHO 311 Masterworks Chorus (1) A chorus presenting oratorios, masses, and the more difficult mixed chorus literature. Open to students in other curricula through audition.
◆ CHO 410 Opera Chorus (1) An elective course devoted to the training of a choral group that participates in opera or operetta productions. May not be used to satisfy choral requirements. Membership by audition.
◆ CHO 411 Chamber Choir (1) Small group of singers specializing in the performance of Renaissance/Baroque, sacred, and secular literature. Membership by audition.
◆ CHO 412 Concert Choir (1) Devoted to acquiring a fine technique in choral singing through the preparation of programs for performance. Membership by audition.
VOC 111 Madrigal Class (1) A survey of madrigal literature through records, tapes, and class performance with emphasis on materials suitable for use in secondary schools. PREREQ: MHL 221 or permission of the instructor. Offered in fall semester of odd-numbered years.
◆ VOC 112 Performance Preparation I (3) A course designed to teach the student performer how to prepare a dramatic vocal score. PREREQ: MTC 110 or equivalent.
◆ VOC 113 Performance Preparation II (3) A continuation of Performance Preparation I with emphasis on advanced literature and interpretive techniques. PREREQ: VOC 112.
VOC 227 Literature of the Musical Theater (3) The literature of the musical theater from Singspiel to Broadway musical. Changes in style are observed and analyzed.
VOC 311 Choral Conducting I (2) A practical application of conducting and vocal techniques in choral direction through practice in conducting a choral group.
VOC 312 Choral Conducting II (2) Continued development of the conducting techniques with emphasis on conducting of polyphonic choral music and on the musical styles of the various choral periods. PREREQ: VOC 311.
VOC 329 Art Song (3) Origins and development of the art song.
VOC 411 Master Class (Voice): Baroque Period (1)
VOC 412 Master Class (Voice): German Lied (1)
VOC 413 Master Class (Voice): French Melodie (1)
VOC 414 Master Class (Voice): 20th-Century Art Song (1)
VOC 415 English-Italian Diction (3) English, Italian, and Latin diction for singers. Use of phonetics with application to singing of selected songs.
VOC 416 French-German Diction (3) French and German diction for singers. Use of phonetics with application to singing of selected songs.
◆ VOC 421 Opera Workshop (2) The preparation of a musical production; coaching of scenes, stage movement, and costuming.
◆ VOC 424 Musico-Dramatic Production (1-3) Major roles and/or major responsibilities in extended productions. By audition.
VOC 426 Choral Literature (3) The development and performance style of the choral repertoire.
◆ VOC 429 Special Subjects Seminar (1-3) Significant topics presented by faculty members and/or visiting lecturers. Designed to meet the specific needs of undergraduate music majors.
◆ VOC 436 Vocal-Choral Music Workshop (1-3) Specialized workshops in the area of vocal and/or choral music. Subject to be announced at the time of the offering.
VOI 191 Voice Class (1) Class instruction in a minor performance area. Open to nonmusic majors with permission of the department chairperson.
VOI 192 Voice Class (1) Continuation of VOI 191. PREREQ: VOI 191.
VOI 413 Elective credit for senior recital. (1) Available to music education seniors only during the nonstudent teaching semester by permission of the department.

◆ This course may be taken again for credit.

Academic Services Division

Vivian Nix-Early, *Assistant Vice President for Academic Affairs*

Department of Educational Services

Ronn Jenkins, *Chairperson*

PROFESSORS: Dinniman, Egan, Lide

ASSOCIATE PROFESSORS: Blair, Butcher, Casiato, Giangiulio, Jenkins, Kyper, Lee, Schuette, Steinberg

ASSISTANT PROFESSORS: Corbett, Grice, Patrick

INSTRUCTORS: Breunig, Guy, McCoach

The Department of Educational Services is an amalgam of University faculty who have specific and specialized administrative and/or teaching assignments at the University. While much of the assigned responsibility is to facilitate students' out-of-class learning, regular classroom teaching is still included. Areas within the Department of Educational Services include academic and career advising, athletic and academic administration, tutoring, and other articulated teaching and/or administrative assignments.

The department administers the following credit-bearing courses and special programs.

UNIVERSITY 101: The Student and the University (1) This course is taken as part of the New Student Orientation Program, which begins in summer. The academic year course begins with Freshman Convocation and continues through the first semester in small section classes. Graded on a pass/fail basis, this course is required of all new freshmen and all new transfer students who transfer fewer than 33 credits. The course assists students to obtain the skills necessary for successful college adjustment and for development as a whole person and a citizen beyond the college years. Emphasis is placed on increasing the student's awareness of the world around him/her.

WCJ 100 Introduction to American Culture (3) A course designed for the orientation of foreign students and new residents to life and study in the United States. A study of American higher education, personal values, attitudes, and cultural patterns. Emphasis is on the diversity of peoples and lifestyles. Not open to U.S. citizens for graduation credits.

Military Science (Army ROTC)

West Chester University students are eligible to participate in the Army Reserve Officers' Training Corps (ROTC) Program through a formal cross-enrollment agreement with the Widener University Department of Military Science. Army ROTC offers University students the opportunity to graduate with a college degree and a commission in the United States Army, Army National Guard, or United States Army Reserve. All Army ROTC classes are conducted on the Widener campus.

The Army ROTC Program consists of a basic course taken during the freshman and sophomore years, and an advanced course taken during junior and senior years. Successful completion of the basic course is required before placement in the advanced course. Students who participated in Junior ROTC in high school or who have prior military service may receive placement in the advanced courses, which is determined by the army professor of military science. The basic course requirement also may be satisfied through attendance at a six-week Army ROTC Basic Camp at the end of the sophomore or junior years. Students enrolled in the advanced course receive a stipend of $100 per month. Guaranteed National Guard and Reserve Forces options also are available.

Nursing students who complete the four-year or two-year program, obtain their nursing degree, and pass their Nursing Board Examinations are commissioned into the Army Nurse Corps.

Two-year (limited) and three-year Army ROTC scholarships are available on a competitive basis. These scholarships pay 80% of the student's tuition or $7,000 (whichever is greater) and include payment of certain University fees, a book and school supplies subsidy, and a $100.00 per month stipend (up to $1,000 per year).

Application for two- and three-year Army ROTC scholarships must be submitted early in the spring semester of the freshman or sophomore year (respectively). Applications for attendance at the Army ROTC Basic Camp must be submitted early in the spring semester of the sophomore year.

Military science students also participate in orientation and field training activities as part of the military science curriculum. These activities are explorations of historical, organizational, and functional activities of the U.S. Army, conducted in conjunction with the Army Officer Education Program, and are recognized as a part of the process for preparation of cadets for commissioning.

Activities are conducted on and off campus through tours, field trips, laboratory sessions, and practical field applications. Practical field application activities include marksmanship, land navigation, small boat operations, small units operations, rappelling, skiing, mountaineering, water survival, color guard, drill team, rifle team, organized athletics, and other military skills. Varying degrees of health and body risk are involved in these activities. Participants are required to show proof of personal medical insurance coverage and to sign waivers of liability. The government of the United States, the state of Pennsylvania, West Chester University, its officers, trustees, employees, agents, or students assume no liability for any injury caused during the above activities.

Individuals not registered in military science courses may participate in these activities if they meet the following additional prerequisities: (1) be a bona fide student, faculty, administrator, or staff member of the University, (2) have the prerequisite level of physical conditioning, and (3) have permission from the program director.

For further information on scholarship and career opportunities, contact the professor of military science, Widener University, Chester, PA 19013, 610-876-2446.

COURSE DESCRIPTIONS
MILITARY SCIENCE

Symbol: MSI

101 Introduction to ROTC I (1) This introductory course is a study of American military history from the earliest times to present. Other topics include the organization and history of ROTC; the organization of the Army, and its military customs, traditions, and courtesies; the role of the Army in national security; ethics; and emphasis on the evaluation of military leadership as viewed from the knowledge of the historically tested principles of war. PREREQ: Full-time undergraduate student.

102 Fundamentals of Leadership (1½) Continued study of the organization and history of ROTC and the evolution of military leadership as reviewed from the knowledge of the historically tested principles of war. PREREQ: Full-time undergraduate student.

201 Methods of Instruction (½) Practical approach to methods and techniques of instruction. Includes characteristics and principles of instruction, instructor preparation, speech techniques, use of instructional aids, and instruction evaluation through student presentations. Offered first half of semester. PREREQ: MSI 101 and MSI 102, or permission of instructor of military science.

202 Theory and Dynamics of the Organization (1½) Introductory course covering broad concepts of military science, including branches and mission, the structure and functions of the defense establishment, and the military as a profession. PREREQ: MSI 101, 102, and 201, or permission of instructor of military science.

301-302 Contemporary Military Principles and Group Dynamics (3) (3) A study of leadership and management principles and their universality in the military-civilian environment. Examination of traditional and behavioral management concepts, structure, and the interaction of organizations and subsystems. Practical approach to methods and techniques of communication and instruction. PREREQ: Army ROTC advanced course standing or permission of instructor of military science.

401-402 Military Organization and Management (2) (2) A continued study of leadership and management, emphasizing applications in military operations, an analysis of staff organizations and procedures, resources allocations, the theory and application of military law, examination of the role of the military structure in the execution of national security policy, and case study investigations of the duties, obligations, and responsibilities of a commissioned officer. PREREQ: Army ROTC advanced course standing or permission of instructor of military science.

Additional Requirements. Students enrolled in the Army ROTC Program are required to complete written communications, human behavior, math reasoning, computer literacy, and military history courses prior to commissioning. Scholarship students are required to take one semester of a foreign language.

Air Force ROTC

West Chester University students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through a cross-enrollment agreement with Saint Joseph's University. All aerospace studies courses will be held on the Saint Joseph's campus. The AFROTC program enables a college student to earn a commission as an Air Force officer while concurrently satisfying requirements for his or her baccalaureate degree.

The program of aerospace studies at Saint Joseph's University offers both two-year and four-year curricula leading to a commission as a second lieutenant in the Air Force. In the four-year curriculum, a student takes the General Military Course (GMC) during the freshman and sophomore years, attends a four-week summer training program, and then takes the Professional Officer Course (POC) in the junior and senior years. A student is under no contractual obligation to the Air Force until entering the POC or accepting an Air Force scholarship. In the two-year curriculum, a student attends a six-week summer training program and then enters the POC in the junior year. Students opting for the two-year curriculum must apply for acceptance to the POC by the end of the first semester or quarter of their sophomore year.

The subject matter of the freshman and sophomore years is developed from a historical perspective and focuses on the scope, structure, and history of military power with the emphasis on the development of air power. During the junior and senior years, the curriculum concentrates on the concepts and practices of leadership and management, and the role of national security forces in contemporary American society.

In addition to the academic portion of the curricula, each student participates in an hour-and-a-half leadership laboratory each week. During this period, the day-to-day skills and working environment of the Air Force are discussed and explained. The leadership lab uses a student organization that allows students to practice leadership and management techniques.

Air Force ROTC offers 2-, 2½-, 3-, and 3½-year scholarships on a competitive basis to qualified applicants. All scholarships cover tuition, lab fees, reimbursement for books, plus a $100 tax-free monthly stipend. All members of the POC, regardless of scholarship status, receive the $100 tax-free monthly stipend.

For further information on the cross-enrollment program, scholarships, and career opportunities, contact the professor of aerospace studies, AFROTC Det 750, Saint Joseph's University, Philadelphia, PA 19131, 610-660-1190.

COURSE DESCRIPTIONS
AEROSPACE STUDIES

Symbol: AER

101 Air Force Today I (1) Introductory course exploring the military as a profession, including civilian control of the U.S. Armed Forces, function and organization of the U.S. Air Force, and organization and operation of U.S. strategic offensive forces.

102 Air Force Today II (1) Introductory course exploring U.S. general purpose and defensive forces including mission and organization of the major U.S. Air Force Commands and separate operating agencies, major functions, and conduct of joint service military operations. Discusses air defense, detection systems, close air support, and air superiority.

201 Development of Air Power I (1) A study of the development of aerospace power from balloons and dirigibles through the employment of U.S. air power in World War II. The course includes the military theory of aerospace power employment.

202 Development of Air Power II (1) A continuation course studying the employment of U.S. air power in the Korean conflict, relief missions, and civic action programs in the late 1960's, and the war in Southeast Asia. Research is conducted into the military theory of aerospace force employment.

311 Management and Leadership I (1½) A study of managerial theory, concepts, and techniques of decision making, and the basic functions of management with particular emphasis on applications for Air Force officers.

312 Management and Leadership II (1½) An interdisciplinary approach to leadership, which includes the study of human behavior and relationships, motivation, professional ethics, and leadership styles. Communication skills are stressed through written and oral assignments.

431 National Security Forces I (1½) A focus on the Armed Forces as an integral and inseparable element of society. Primary emphasis is placed on the overall national security process and the factors that comprise it. The impact of a nation's military, economic, psychological, and technical components on national security policy is examined. Other topics include major geopolitical hotspots and the origin of arms races.

432 National Security Forces II (1½) A continuation course studying civilian-military relations. Topics include civilian control of the military, conflict control, military professionalism, and military justice. Emphasis is placed on the reciprocal responsibilities of civilians and the military in a democratic society.

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LINWOOD J. WHITE (1968) *Chairperson, Department of Art; Associate Professor*
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B.M., M.M., D.M.A., University of Texas at Austin

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FRANKLIN YOUNG (1985) *Professor of Health*
A.B., Mercer University; B.S.A., M.Agr., Ph.D., University of Florida

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CARLOS R. ZIEGLER (1969) *Professor of Childhood Studies and Reading*
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MARTIN ZLOTOWSKI (1973) *Associate Professor of Special Education*
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B.A., Swarthmore College; M.A., Hahnemann Medical College

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B.S., Massachusetts Institute of Technology; M.S., Ph.D., Purdue University; David Ross Research Associateship at Institut Henri Poincare

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B.S., M.S., Southern Illinois University; Ph.D., University of Toronto

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B.S., Ohio State University; M.E.P.C., Pennsylvania State University

GAIL M. FELLOWS *Department of Health*
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B.A., Yale University; M.D., Cornell University Medical College

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B.A., University of New Hampshire; M.A., Ph.D., Southern Illinois University

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B.S., M.A., Pennsylvania State University; Ph.D., Temple University

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B.S., Pennsylvania State University; Ph.D., Michigan State University

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M.Ed., Cabrini College; A.S., Hahnemann Medical College; B.S.W., Temple University

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B.S., Princeton University; M.D., Columbia College of Physicians and Surgeons

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B.S., Brock University; M.S., Ph.D., University of Toronto

JACK C. WHITE *Department of Biology*
B.S., M.D., University of Vermont, F.A.C.S.

SUSAN WIX *Department of Health*
B.S., West Chester University

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B.S., Beloit College; M.D., Indiana University

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B.A., Princeton University; M.D., Jefferson Medical College, Thomas Jefferson University

Emeriti

'ALEXANDER ANTONOWICH, *Music Education*

'ELEANOR ASHKENAZ, *Chemistry*

'DOROTHY D. BAILEY, *English*

'HAROLD W. BENDA, *Education*

BERNICE BERNATZ, *Dean of Women Emerita*

'JAMES A. BINNEY, *English*

MARY M. BLISS, *Biology*

JUSTO B. BRAVO, *Chemistry*

WALTER E. BUECHELE, JR., *Counselor, Secondary, and Professional Education*

ROBERT E. CARLSON, *History*

'PAUL E. CARSON, *Music*

NONA E. CHERN, *Childhood Studies and Reading*

CARMELA L. CINQUINA, *Biology*

MARY E. CLEARY, *Education*

'JOHN W. CLOKEY, *Dean of Arts and Letters Emeritus*

BARBARA J. COATES, *Physical Education*

BERNARD B. COHEN, *Psychology*

'FAYE A. COLLICOTT, *Librarian*

GERALDINE C. CONBEER, *Librarian*

EDWIN B. COTTRELL, *Health and Physical Education*

'GEORGE R. CRESSMAN, *Education*

'KATHERINE M. DENWORTH, *Education*

'MARK M. EVANS, *Director of Student Teaching*

'MARION FARNHAM, *Art*

RUTH FELDMAN, *Psychology*

ALBERT E. FILANO, *Vice President for Academic Affairs Emeritus and Mathematical Sciences*

BYRON Y. FLECK, *Dean of Social Sciences Emeritus*

'THOMAS J. FRANCELLA, *Criminal Justice*

CHARLOTTE M. GOOD, *Education*

'ROBERT B. GORDON, *Sciences*

'ANNE M. GOSHEN, *Psychology*

MIRIAM S. GOTTLIEB, *Music*

SEYMOUR S. GREENBERG, *Geology*

'THELMA J. GREENWOOD, *Biology*

MADELYN GUTWIRTH, *Foreign Languages*

'H. THEODORE HALLMAN, *Art*

JOAN HASSELQUIST, *Childhood Studies and Reading*

JACK GARDNER HAWTHORNE, *Art*

'CHARLES W. HEATHCOTE, *Social Sciences*

'THOMAS J. HEIM, *Social Sciences*

WALTER J. HIPPLE, *Philosophy*

PHILIP P. HOGGARD, *Education*

PAMELA JUDSON-RHODES (HEMPHILL), *Art*

CAROLYN B. KEEFE, *Communication Studies*

'W. GLENN KILLINGER, *Dean of Men Emeritus*

CHARLOTTE E. KING, *Childhood Studies and Reading*

MARY L. KLINE, *Nursing*

'CARRIE C. KULP, *Education*

GEORGE LANGDON, *Geography and Planning*

'MURIEL LEACH, *Health and Physical Education*

MELVIN M. LORBACK, *Physical Education*

'GRACE D. MCCARTHY, *English*

'EMIL H. MESSIKOMER, *Dean Emeritus*

'LLOYD C. MITCHELL, *Dean of Music Emeritus*

WILLIAM M. MOREHOUSE, *Theatre Arts*

SHIRLEY A. MUNGER, *Music*

'DOROTHY R. NOWACK, *Health*

BERNARD S. OLDSEY, *English*

WILLIAM R. OVERLEASE, *Biology*

JACK A. OWENS, *Health and Physical Education*

RUTH PETKOFSKY, *Childhood Studies and Reading*

'DOROTHY RAMSEY, *English*

N. RUTH REED, *Health*

RUSSELL K. RICKERT, *Physics*

WALTER NATHANIEL RIDLEY, *Education*

ALBERT ROBERTS, *Foreign Languages*

'B. PAUL ROSS, *Education*

'HELEN RUSSELL, *Library Science*

GLENN W. SAMUELSON, *Anthropology and Sociology*

'GERTRUDE K. SCHMIDT, *Music*

JANE E. SHEPPARD, *Vocal and Choral Music*

W. CLYDE SKILLEN, *Biology*

'KENNETH C. SLAGLE, *Dean of Arts and Sciences Emeritus*

'CHARLES A. SPRENKLE, *Dean of Music Emeritus*

RUTH S. STANLEY, *Mathematical Sciences*

R. GODFREY STUDENMUND, *Education*

RUSSELL L. STURZEBECKER, *Health and Physical Education*

ROY D. SWEET, *Vocal and Choral Music*

'EARL F. SYKES, *President Emeritus*

ELINOR Z. TAYLOR, *Physical Education*

'JOSEPH M. THORSON, *Business Administration*

'WILLARD J. TREZISE, *Biology*

'EDWARD T. TWARDOWSKI, *Health and Physical Education*

'S. ELIZABETH TYSON, *English*

'EARLE C. WATERS, *Health and Physical Education*

SOL WEISS, *Mathematical Sciences*

THEODORA L. WEST, *English*

ARDIS M. WILLIAMS, *Chemistry*

LOIS M. WILLIAMS, *Music*

HARRY WILKINSON, *Music*

LLOYD C. WILKINSON, *Physical Education*

'JOSEPHINE E. WILSON, *English*

JAMES J. WRIGHT, *Music Theory and Composition*

EDWIN L. YOUMANS, *Health and Physical Education*

'EDWARD ZIMMER, *Music*

'Deceased

Trustees Achievement Awards

1985
FRANK GROSSHANS
CHARLES C. SOUFAS, JR.

1986
RICHARD W. FIELDS

1987
MARSHALL J. BECKER
WACLAW SZYMANSKI

1989
CHRISTOPHER BUCKLEY
LARRY A. NELSON

1990
PAUL STOLLER

1992
MARY E. CRAWFORD

Distinguished Teaching Chairs

1982–1983
FRANK A. SMITH
JANE B. SWAN

Merit Awards

1982–1983
DIANE O. CASAGRANDE
MARY A. KEETZ
JANE E. SHEPPARD
CHARLES H. STUART

1983–1984
ELIZABETH A. GIANGIULIO
KOSTAS MYRSIADES
LOIS WILLIAMS

1984–1985
FRANK E. MILLIMAN
RUTH I. WEIDNER

1986–1987
G. WINFIELD FAIRCHILD
KOSTAS MYRSIADES

1987–1988
WALLACE J. KAHN
STERLING E. MURRAY
ARLENE C. RENGERT

1988–1989
PAMELA HEMPHILL

1989–1990
MADELYN GUTWIRTH
JOAN HASSELQUIST

1990–1991
BENJAMIN WHITTEN

1991–1992
CHRISTOPHER BUCKLEY

1992–1993
WILLIAM TOROP

Irving Hersch Cohen Faculty Merit Award

1990
DOROTHY NOWACK

1991
GEORGE CLAGHORN

1993
JUDITH FINKEL

Distinguished Faculty Awards

1974–1975
THOMAS A. EGAN, *Teaching*
E. RILEY HOLMAN, *Teaching*
MICHAEL A. PEICH, *Teaching*

1975–1976
WALTER E. BUECHELE, JR., *Service*
CARMELA L. CINQUINA, *Service*
PHILLIP B. DONLEY, *Service*
GEORGE W. MAXIM, *Teaching*
EDWARD N. NORRIS, *Service*
PHILIP D. SMITH, JR., *Teaching*
WILLIAM TOROP, *Teaching*

1976–1977
ROBERT E. BYTNAR, *Service*
ANDREW E. DINNIMAN, *Service*
IRENE G. SHUR, *Teaching*
RUSSELL L. STURZEBECKER, *Service*

1977–1978
MARC L. DURAND and ROBERT F. FOERY (Joint Project), *Service*
BERNARD S. OLDSEY, *Service*
GEORGE F. REED, *Teaching*
RICHARD I. WOODRUFF, *Teaching*

1978–1979
ROBERT E. CARLSON, *Service*
JOHN J. TURNER, JR., *Teaching*
C. RALPH VERNO, *Teaching*
ROBERT H. WEISS, *Service*

1979–1980
CAROLYN B. KEEFE, *Teaching*
JOHN A. MANGRAVITE, *Teaching*
PHILIP D. SMITH, JR., *Service*
NORBERT C. SOLDON, *Service*

1980–1981
LOUIS A. CASCIATO, *Teaching*
PHILIP B. RUDNICK, *Service*
FRANK A. SMITH, JR., *Teaching*
JANE B. SWAN, *Teaching*
JOSEPH M. THORSON, *Service*

ACADEMIC CALENDAR 1994–95

FALL SEMESTER 1994

September 5	Labor Day — residence halls open
September 6	Department Meetings
September 7	Classes begin — 8 a.m.
September 6	Rosh Hashanah*
September 15	Yom Kippur*
November 23	Thanksgiving Recess begins — 8 a.m.
November 28	Thanksgiving Recess ends — 8 a.m.
December 15-21	Examination Period
December 18	Commencement
December 21	Fall Semester ends

SPRING SEMESTER 1995

January 23	Department Meetings
January 24	Classes begin — 8 a.m.
March 17	Spring Break begins — 5 p.m.
March 27	Spring Break ends — 8 a.m.
April 14	Good Friday*
April 15	Passover*
May 13-20	Examination Period
May 21	Commencement
May 20	Spring Semester ends

SUMMER SESSIONS 1995

June 5–June 23	Pre Session
June 26–August 4	Regular Session
August 7–August 25	Post Session

*Although the University will be in session, no examinations are to be administered on these major Jewish and Christian Holy Days.

University Policy for Storm Closings

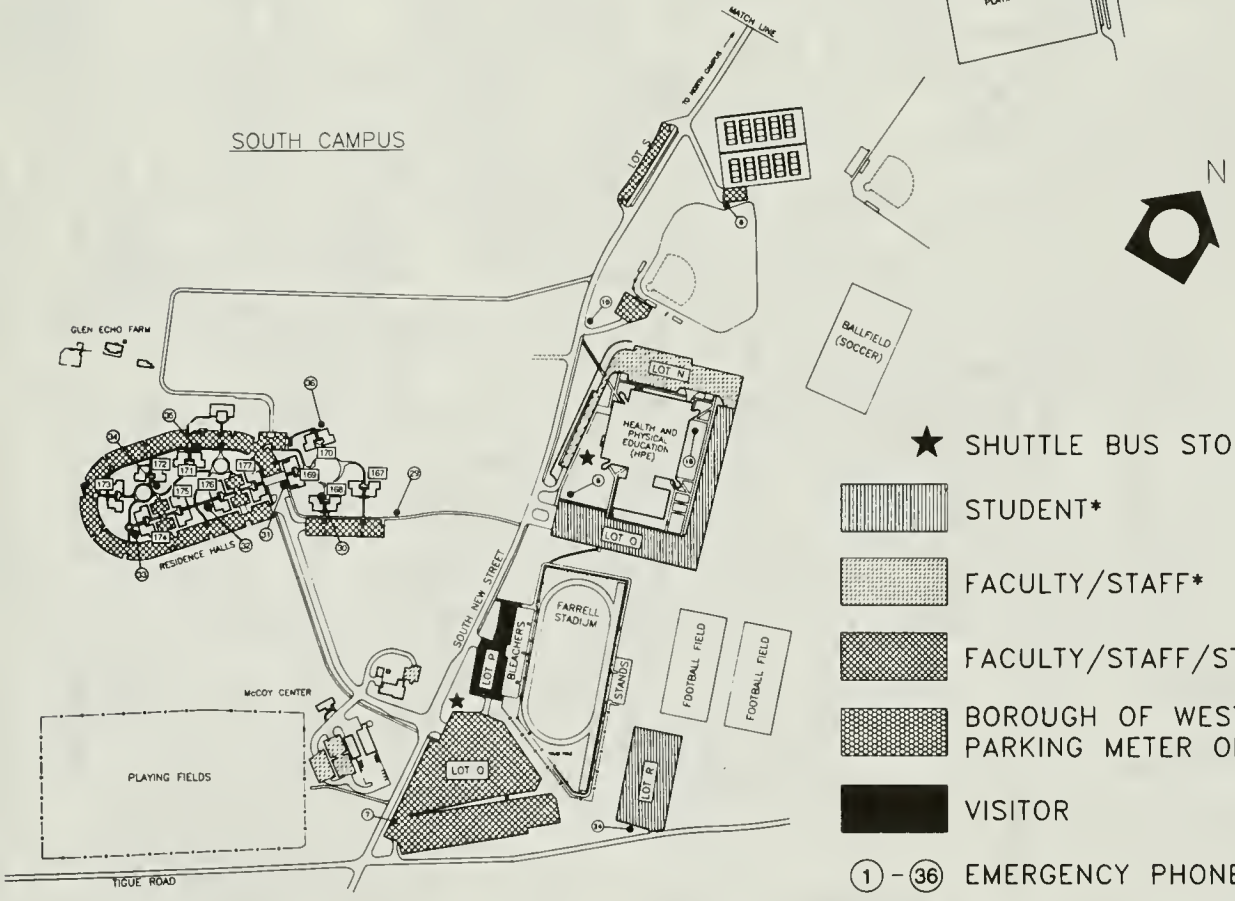
When storm conditions affect the operation of the University, announcements are made over local radio and TV stations via a system of code numbers keyed to affected schools. Prefixes indicate whether the school will be closed or open later than usual. West Chester's numbers and applicable prefixes are:

853 — University Number; this number with no prefix indicates classes will be cancelled for the day.
2853 — Evening classes will be cancelled.
585 — School will open one hour late.
6853 — School will open two hours late.

On Tuesday or Thursday, either a two-hour delay or class cancellation will be called. Two-hour delays on these days will mean that 8 a.m. classes are cancelled and the class normally starting at 9:30 a.m. will start at 10 a.m. and continue to 11 a.m.

On Monday, Wednesday, or Friday, a one-hour delay means that the 8 a.m. class is cancelled. A two-hour delay means that both the 8 a.m. and 9 a.m. classes are cancelled.

Campus Map



West Chester University

NORTH CAMPUS

SOUTH CAMPUS

★ SHUTTLE BUS STOP

STUDENT*

FACULTY/STAFF*

FACULTY/STAFF/STUDENT*

BOROUGH OF WEST CHESTER PARKING METER OR PERMIT

VISITOR

① - ㊱ EMERGENCY PHONES

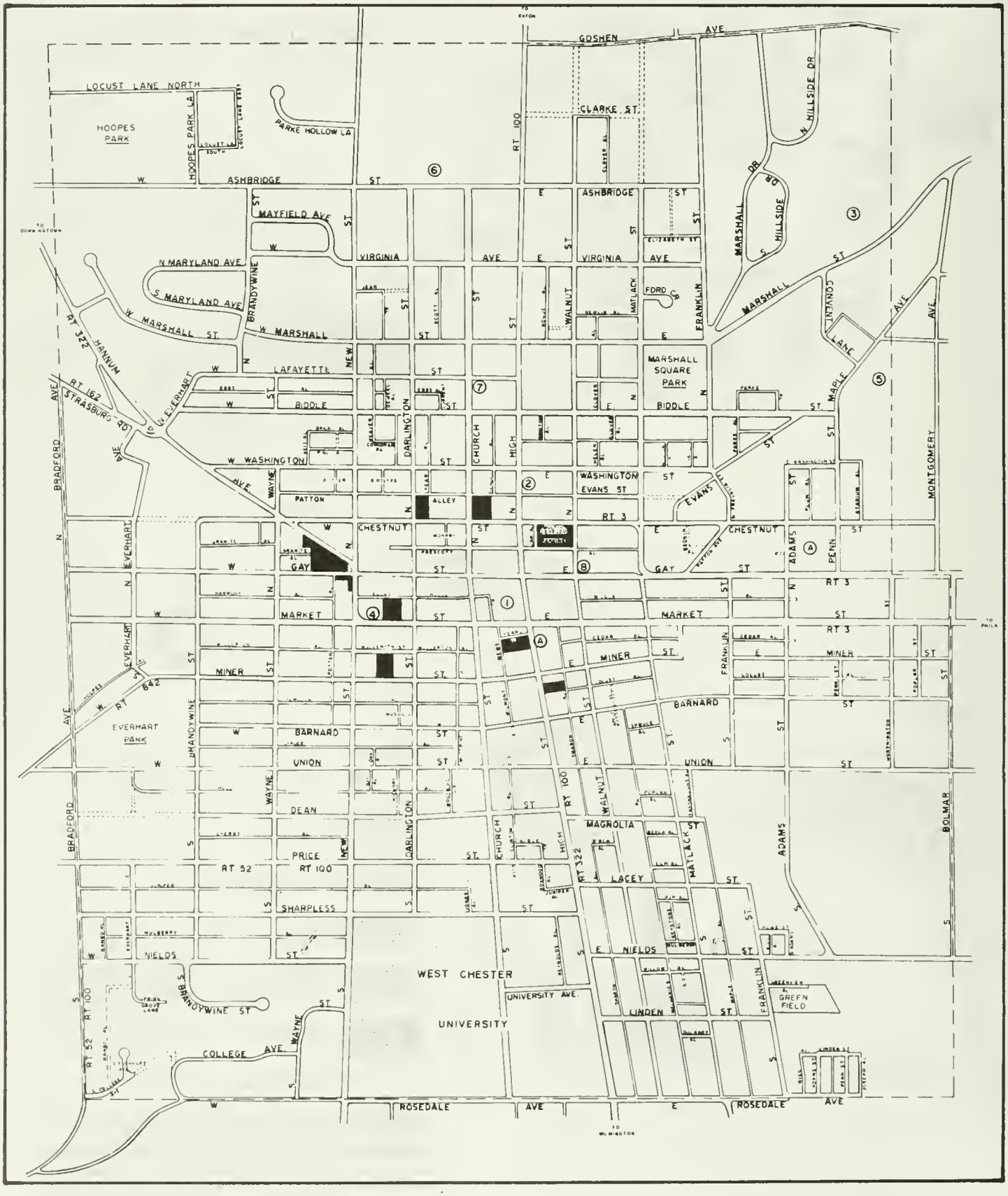
*University decal required. Lot restrictions designated by posted signs, which takes precedent over published materials.

Parking decals and enforcement subject to change as posted.

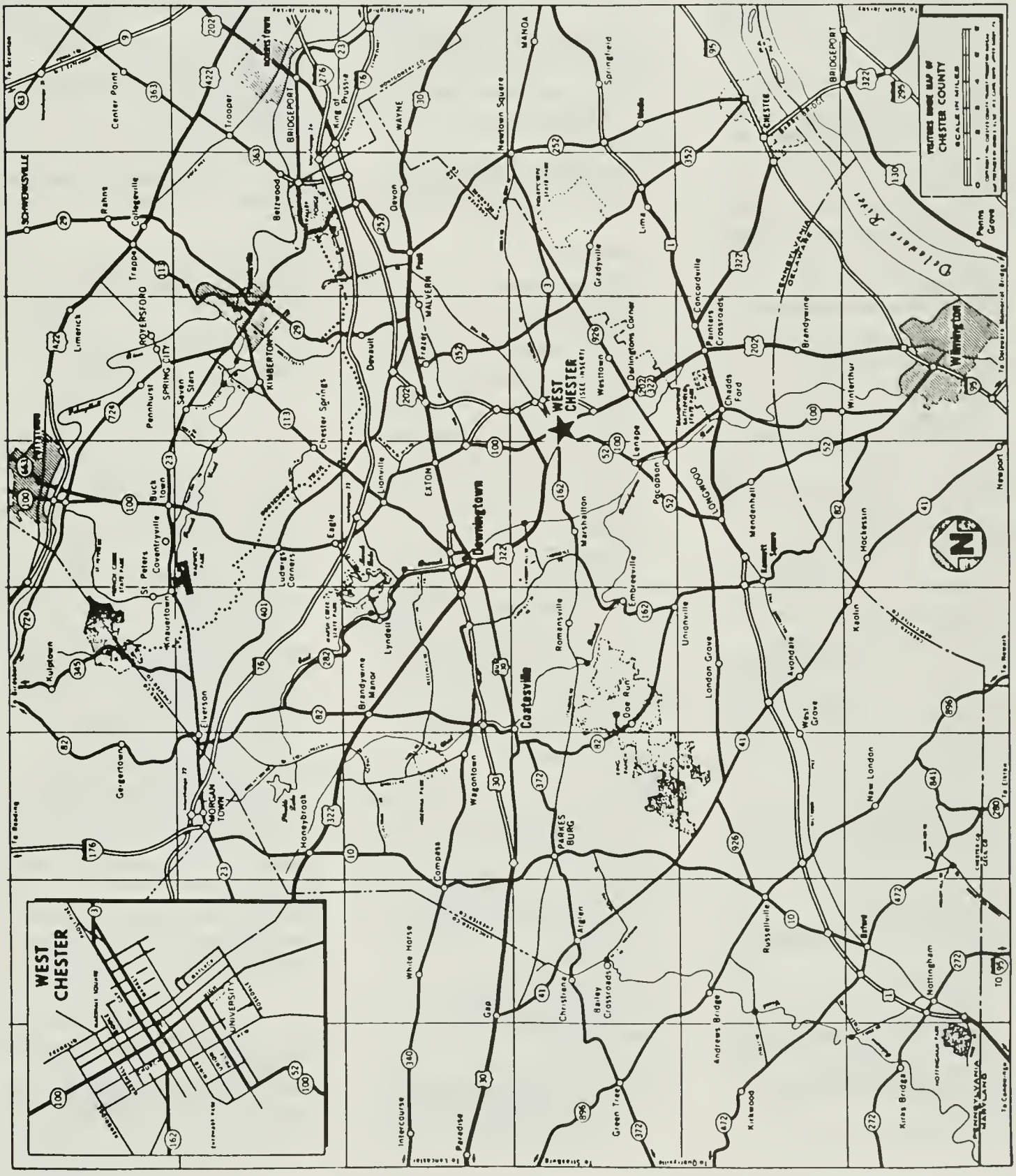
A separate map designating parking for the handicapped is available at Public Safety in the Peoples Maintenance Building.

Map prepared by Facilities Planning and Construction Division.

Borough Map


GOSHEN AVE
LOCUST LANE NORTH
HOOPES PARK
HOOPES PARK LA
PARKE HOLLOW LA
RT 100
CLARKE ST
N HILLSIDE DR
MARSHALL DR
S HILLSIDE DR
W ASHBRIDGE ST
ASHBRIDGE ST
MAYFIELD AVE
N MARYLAND AVE
S MARYLAND AVE
VIRGINIA AVE
BRANDYWINE
WALNUT
MATLACK
FORD
FRANKLIN
MARSHALL ST
CONVENT LANE
W MARSHALL ST
RT 322
HANNUM AVE
RT 162 (STRASBURG RD)
W LAFAYETTE NEW ST
MARSHALL SQUARE PARK
BIDDLE ST
DARLINGTON
CHURCH
HIGH
MAPLE ST
MONTGOMERY AVE
BRADFORD AVE
W WASHINGTON AVE
WAYNE
PATTON
ALLEY
WASHINGTON
EVANS ST
EVANS
RT 3
CHESTNUT ST
ADAMS
PENN
GAY ST
MARKET ST
MINER ST
EVERHART AVE
RT 842
EVERHART PARK
BARNARD ST
UNION ST
DEAN
PRICE
RT 52
RT 100
SHARPLESS
NIELDS ST
MAGNOLIA ST
LACEY ST
BOLMAR
WEST CHESTER
UNIVERSITY
UNIVERSITY AVE
GREEN FIELD
LINDEN ST
BRANDYWINE ST
COLLEGE AVE
ROSEDALE AVE
TO EATON
TO DOWNTOWN
TO WILMINGTON
TO PHILA

Chester County Map



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Departmental Telephone Numbers

College of Arts and Sciences	(610) 436-3521
Anthropology/Sociology	436-3500
Art	436-2755
Biology	436-2538
Chemistry	436-2631
Communication Studies	436-2500
English	436-2822
Foreign Languages	436-2700
Geology and Astronomy	436-2727
History	436-2201
Mathematics and Computer Science	436-2440
Philosophy	436-2841
Physics	436-2497
Psychology	436-2945
Theatre Arts	436-2500
School of Business and Public Affairs	436-2824
Accounting	436-2236
Criminal Justice	436-2647
Economics	436-2134
Geography and Planning	436-2343
Management	436-2304
Marketing	436-2304
Political Science	436-2343
Social Work	436-2527
School of Education	436-2321
Childhood Studies and Reading	436-2944
Counselor/Secondary/ Professional Education	436-2958
Instructional Media	436-2233
Special Education	436-2579
School of Health Sciences	436-2938
Communicative Disorders	436-3401
Health	436-2931
Nursing	436-2219
Physical Education	436-2260
Sports Medicine	436-3293
School of Music	436-2739
History/Literature	436-2739
Instrumental Music	436-2739
Keyboard Music	436-2739
Music Education	436-2739
Theory and Composition	436-2739
Vocal and Choral	436-2739

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